

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.01
 Actual Amplitude: 0.01
 Actual Power: 0.0001
 Distortion 2H-14H: 0.0773688%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.2686	end: 11.3125	delta: 0.044
P2 start: 33.6874	end: 33.8124	delta: 0.1251
P3 start: 56.1564	end: 56.3435	delta: 0.1871
P4 start: 78.6396	end: 78.8603	delta: 0.2206

H3: 0.000440168	H15: 0.998822	H15f: 0.0665881
H5: 0.000308117	H17: -1.00093	H17f: -0.0588782
H7: 0.000102995	H19: -0.00142835	H19f: -7.51762e-05
H9: -0.000112993	H21: -0.000929484	H21f: -4.42611e-05
H11: -0.000287006	H23: -0.000319732	H23f: -1.39014e-05
H13: -0.000451843	H25: 0.000346063	H25f: 1.38425e-05
	H27: 0.00093121	H27f: 3.44893e-05
	H29: 0.00129381	H29f: 4.46141e-05
	H31: -0.997386	H31f: -0.0321737

c1sd = 0.0405
c1ed = 0.0
c2sd = -0.0002
c2ed = -0.0001
c3sd = -0.0001
c3ed = 0.0
c4sd = -0.0001
c4ed = 0.0
varx = 0.0086%.

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Desired Amplitude:	0.02
Actual Amplitude:	0.0200002
Actual Power:	0.000400006
Distortion 2H-14H:	0.152877%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.2869	end:	11.3749	delta:	0.088
P2 start:	33.625	end:	33.8752	delta:	0.2502
P3 start:	56.063	end:	56.437	delta:	0.3741
P4 start:	78.5295	end:	78.9707	delta:	0.4412

H3: 0.000839854	H15: 0.997395	H15f: 0.066493
H5: 0.000584356	H17: -1.00161	H17f: -0.0589183
H7: 0.000185389	H19: -0.00288343	H19f: -0.00015176
H9: -0.000233152	H21: -0.00178487	H21f: -8.49938e-05
H11: -0.000649208	H23: -0.000558619	H23f: -2.42878e-05
H13: -0.000883247	H25: 0.000703048	H25f: 2.81219e-05
	H27: 0.00192762	H27f: 7.13932e-05
	H29: 0.00232525	H29f: 8.01812e-05
	H31: -0.993794	H31f: -0.0320579

c1sd = 0.0808
c1ed = 0.0
c2sd = -0.0002
c2ed = 0.0003
c3sd = -0.0001
c3ed = 0.0001
c4sd = -0.0001
c4ed = 0.0002
varx = 0.0172%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.03
 Actual Amplitude: 0.03
 Actual Power: 0.000900001
 Distortion 2H-14H: 0.203295%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.303	end: 11.4351	delta: 0.1321
P2 start: 33.5646	end: 33.9399	delta: 0.3754
P3 start: 55.9722	end: 56.5332	delta: 0.561
P4 start: 78.4188	end: 79.0804	delta: 0.6616

H3: 0.0010903	H15: 0.995526	H15f: 0.0663684
H5: 0.000818105	H17: -1.00224	H17f: -0.0589551
H7: 0.000395717	H19: -0.00395485	H19f: -0.00020815
H9: -0.000459	H21: -0.00240129	H21f: -0.000114347
H11: -0.000848829	H23: -0.00114485	H23f: -4.97762e-05
H13: -0.00108952	H25: 0.00141673	H25f: 5.66693e-05
	H27: 0.00260774	H27f: 9.65831e-05
	H29: 0.00260062	H29f: 8.96765e-05
	H31: -0.988822	H31f: -0.0318975

c1sd = 0.1187
c1ed = -0.0019
c2sd = 0.0016
c2ed = 0.0029
c3sd = 0.0021
c3ed = 0.0032
c4sd = -0.001
c4ed = 0.0002
varx = 0.0237%

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Desired Amplitude: 0.04
 Actual Amplitude: 0.0400055
 Actual Power: 0.00160044
 Distortion 2H-14H: 0.190922%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.3154	end: 11.4915	delta: 0.1761
P2 start: 33.5137	end: 34.0141	delta: 0.5004
P3 start: 55.8838	end: 56.6318	delta: 0.748
P4 start: 78.3083	end: 79.1906	delta: 0.8823

H3: 0.00102628	H15: 0.992772	H15f: 0.0661848
H5: 0.000714036	H17: -1.00325	H17f: -0.0590148
H7: 0.000486449	H19: -0.00428755	H19f: -0.000225661
H9: -0.000566575	H21: -0.0019869	H21f: -9.46141e-05
H11: -0.000696722	H23: -0.00136329	H23f: -5.92736e-05
H13: -0.00101928	H25: 0.00179071	H25f: 7.16282e-05
	H27: 0.00226019	H27f: 8.37107e-05
	H29: 0.00187288	H29f: 6.4582e-05
	H31: -0.981589	H31f: -0.0316642

c1sd = 0.1528
c1ed = -0.0073
c2sd = 0.0125
c2ed = 0.0153
c3sd = 0.0061
c3ed = 0.0095
c4sd = -0.0024
c4ed = 0.0014
varx = 0.02489.

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Desired Amplitude:	0.05
Actual Amplitude:	0.0500003
Actual Power:	0.00250003
Distortion 2H-14H:	0.170677%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.3249	end:	11.5449	delta:	0.22
P2 start:	33.4618	end:	34.0869	delta:	0.6251
P3 start:	55.7949	end:	56.7297	delta:	0.9348
P4 start:	78.2008	end:	79.3035	delta:	1.1027

H3: 0.000815571	H15: 0.989921
H5: 0.000724907	H17: -1.00386
H7: 0.000449706	H19: -0.00439095
H9: -0.000399185	H21: -0.0020278
H11: -0.000786503	H23: -0.00105191
H13: -0.000861534	H25: 0.00149213

H27: 0.0025099	H29: 0.000677206
H31: -0.973699	

H15f: 0.0659947	H17f: -0.0590507
H19f: -0.000231103	H21f: -9.65618e-05
H23f: -4.57352e-05	H25f: 5.96852e-05
H27f: 9.29592e-05	H29f: 2.33519e-05
H31f: -0.0314096	

c1sd = 0.1837
c1ed = -0.0151
c2sd = 0.0217
c2ed = 0.0269
c3sd = 0.0088
c3ed = 0.0158
c4sd = -0.002
c4ed = 0.0063
varx = 0.0251%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 6/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.06
Actual Amplitude: 0.0600062
Actual Power: 0.00360074
Distortion 2H-14H: 0.109601%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.3417 end: 11.6053 delta: 0.2636
P2 start: 33.42 end: 34.1698 delta: 0.7498
P3 start: 55.7072 end: 56.829 delta: 1.1217
P4 start: 78.0927 end: 79.4161 delta: 1.3234

H3: 0.000566173
H5: 0.000457576
H7: 0.000182662
H9: -0.000252101
H11: -0.000478409
H13: -0.000587803

H15: 0.985941
H17: -1.00509
H19: -0.00442446
H21: -0.00108308
H23: -0.000274444
H25: 0.00102326
H27: 0.00172466
H29: -0.00088936
H31: -0.96308

H15f: 0.0657294
H17f: -0.0591232
H19f: -0.000232866
H21f: -5.15753e-05
H23f: -1.19324e-05
H25f: 4.09304e-05
H27f: 6.38762e-05
H29f: -3.06676e-05
H31f: -0.0310671

c1sd = 0.2215
c1ed = -0.0145
c2sd = 0.0398
c2ed = 0.05
c3sd = 0.0107
c3ed = 0.0255
c4sd = -0.0044
c4ed = 0.0132
varx = 0.02389.

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and development assistance available via done@tinaja.com or www.tinaja.com/magsn01.html

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Desired Amplitude: 0.07
 Actual Amplitude: 0.0700051
 Actual Power: 0.00490072
 Distortion 2H-14H: 0.0416992%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.351	end: 11.6582	delta: 0.3071
P2 start: 33.3763	end: 34.2504	delta: 0.8742
P3 start: 55.62	end: 56.9285	delta: 1.3085
P4 start: 77.9844	end: 79.5283	delta: 1.5439

H3: 0.000205252	H15: 0.982069	H15f: 0.0654713
H5: 0.000180824	H17: -1.00572	H17f: -0.0591599
H7: 5.80756e-05	H19: -0.00430259	H19f: -0.000226452
H9: -8.17876e-05	H21: -0.000155694	H21f: -7.41401e-06
H11: -0.000199569	H23: 0.00022233	H23f: 9.66653e-06
H13: -0.000221736	H25: 0.000639866	H25f: 2.55946e-05
	H27: 0.000982215	H27f: 3.63783e-05
	H29: -0.0028829	H29f: -9.94103e-05
	H31: -0.952222	H31f: -0.0307168

c1sd = 0.2523
 c1ed = -0.0226
 c2sd = 0.057
 c2ed = 0.0697
 c3sd = 0.0147
 c3ed = 0.0338
 c4sd = -0.0052
 c4ed = 0.0179
 varx = 0.0227%

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 8/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.08
Actual Amplitude: 0.08
Actual Power: 0.00640001
Distortion 2H-14H: 0.0213038%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.3577 end: 11.7085 delta: 0.3508
P2 start: 33.324 end: 34.3226 delta: 0.9986
P3 start: 55.5294 end: 57.0246 delta: 1.4952
P4 start: 77.8746 end: 79.639 delta: 1.7644

H3: 0.000103718	H15: 0.978868	H15f: 0.0652579
H5: 9.60021e-05	H17: -1.0052	H17f: -0.0591293
H7: 3.18471e-05	H19: -0.00513692	H19f: -0.000270364
H9: -3.40455e-05	H21: 0.000219271	H21f: 1.04415e-05
H11: -9.45187e-05	H23: 0.00041839	H23f: 1.81909e-05
H13: -0.000119601	H25: 0.00060709	H25f: 2.42836e-05
	H27: 0.000782977	H27f: 2.89991e-05
	H29: -0.00425326	H29f: -0.000146664
	H31: -0.942265	H31f: -0.0303957

c1sd = 0.2794
c1ed = -0.0303
c2sd = 0.0628
c2ed = 0.0838
c3sd = 0.011
c3ed = 0.043
c4sd = -0.0125
c4ed = 0.0261
varx = 0.0271%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.09
 Actual Amplitude: 0.09
 Actual Power: 0.00809999
 Distortion 2H-14H: 0.0134003%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.3708	end: 11.7653	delta: 0.3945
P2 start: 33.2716	end: 34.3946	delta: 1.123
P3 start: 55.4386	end: 57.1205	delta: 1.6819
P4 start: 77.7647	end: 79.7496	delta: 1.985

H3: 7.47667e-05	H15: 0.975307	H15f: 0.0650204
H5: 4.63778e-05	H17: -1.00455	H17f: -0.059091
H7: 1.4094e-05	H19: -0.00631103	H19f: -0.000332159
H9: -3.17618e-05	H21: 0.000493412	H21f: 2.34958e-05
H11: -5.02874e-05	H23: 0.000590007	H23f: 2.56525e-05
H13: -8.04964e-05	H25: 0.000713848	H25f: 2.85539e-05
	H27: 0.00077921	H27f: 2.88596e-05
	H29: -0.00554507	H29f: -0.000191209
	H31: -0.93116	H31f: -0.0300374

c1sd = 0.3143
 c1ed = -0.0355
 c2sd = 0.0724
 c2ed = 0.0938
 c3sd = 0.013
 c3ed = 0.0461
 c4sd = -0.0129
 c4ed = 0.0272
 varx = 0.0334%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.1
 Actual Amplitude: 0.1
 Actual Power: 0.00999999
 Distortion 2H-14H: 0.01299%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.3796	end: 11.8179	delta: 0.4383
P2 start: 33.2163	end: 34.4637	delta: 1.2475
P3 start: 55.3465	end: 57.215	delta: 1.8685
P4 start: 77.6545	end: 79.86	delta: 2.2056

H3: 7.23494e-05
 H5: 5.26684e-05
 H7: 1.12752e-05
 H9: -1.01188e-05
 H11: -5.0709e-05
 H13: -7.78759e-05

H15: 0.971931
H17: -1.00323
 H19: -0.00774831
 H21: 0.000607887
 H23: 0.00074878
 H25: 0.000799406
 H27: 0.00091488
 H29: -0.00688449
 H31: -0.920005

H15f: 0.0647954
H17f: -0.0590135
 H19f: -0.000407806
 H21f: 2.8947e-05
 H23f: 3.25557e-05
 H25f: 3.19762e-05
 H27f: 3.38845e-05
 H29f: -0.000237396
 H31f: -0.0296776

c1sd = 0.3442
 c1ed = -0.0431
 c2sd = 0.0773
 c2ed = 0.1027
 c3sd = 0.011
 c3ed = 0.0506
 c4sd = -0.0169
 c4ed = 0.0314
 varx = 0.041%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.11
 Actual Amplitude: 0.11
 Actual Power: 0.0121
 Distortion 2H-14H: 0.00708613%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.3898	end: 11.8717	delta: 0.4819
P2 start: 33.162	end: 34.5338	delta: 1.3717
P3 start: 55.2547	end: 57.3099	delta: 2.0552
P4 start: 77.5442	end: 79.9704	delta: 2.4262

H3: 4.09351e-05	H15: 0.968227	H15f: 0.0645484
H5: 2.56649e-05	H17: -1.00175	H17f: -0.0589267
H7: 1.87263e-06	H19: -0.00923571	H19f: -0.00048609
H9: -4.59945e-06	H21: 0.000829248	H21f: 3.9488e-05
H11: -2.85375e-05	H23: 0.00092128	H23f: 4.00557e-05
H13: -4.29872e-05	H25: 0.000926008	H25f: 3.70403e-05
	H27: 0.000993354	H27f: 3.67909e-05
	H29: -0.00843182	H29f: -0.000290752
	H31: -0.907791	H31f: -0.0292836

c1sd = 0.3755
c1ed = -0.0494
c2sd = 0.0832
c2ed = 0.1126
c3sd = 0.0092
c3ed = 0.0554
c4sd = -0.021
c4ed = 0.0355
varx = 0.0489%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.12
 Actual Amplitude: 0.120002
 Actual Power: 0.0144004
 Distortion 2H-14H: 0.00325433%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.41	end: 11.9355	delta: 0.5256
P2 start: 33.1105	end: 34.6063	delta: 1.4958
P3 start: 55.164	end: 57.4057	delta: 2.2417
P4 start: 77.4341	end: 80.0809	delta: 2.6469

H3: 1.70753e-05	H15: 0.963806	H15f: 0.0642537
H5: 1.04981e-05	H17: -1.00049	H17f: -0.0588525
H7: 3.61381e-07	H19: -0.0108563	H19f: -0.000571386
H9: -4.77826e-06	H21: 0.00108872	H21f: 5.18438e-05
H11: -1.03486e-05	H23: 0.00114363	H23f: 4.9723e-05
H13: -2.29616e-05	H25: 0.00113117	H25f: 4.52466e-05
	H27: 0.00115224	H27f: 4.26755e-05
	H29: -0.0100104	H29f: -0.000345185
	H31: -0.89377	H31f: -0.0288313

c1sd = 0.4164
c1ed = -0.0447
c2sd = 0.0907
c2ed = 0.1261
c3sd = 0.0069
c3ed = 0.0629
c4sd = -0.0268
c4ed = 0.0418
varx = 0.0575%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 13/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.13
Actual Amplitude: 0.13
Actual Power: 0.0169
Distortion 2H-14H: 0.00408909%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.4179 end: 11.9871 delta: 0.5692
P2 start: 33.0542 end: 34.6741 delta: 1.6199
P3 start: 55.0709 end: 57.4992 delta: 2.4282
P4 start: 77.3233 end: 80.1908 delta: 2.8676

H3: 2.33511e-05
H5: 1.27263e-05
H7: 3.08568e-06
H9: -4.73508e-06
H11: -1.21532e-05
H13: -2.80213e-05

H15: 0.959992
H17: -0.998173
H19: -0.0127703
H21: 0.00123794
H23: 0.00131226
H25: 0.00129993
H27: 0.00132857
H29: -0.0116992
H31: -0.880583

H15f: 0.0639995
H17f: -0.0587161
H19f: -0.000672123
H21f: 5.89496e-05
H23f: 5.70546e-05
H25f: 5.19973e-05
H27f: 4.92063e-05
H29f: -0.000403421
H31f: -0.0284059

c1sd = 0.4444
c1ed = -0.0502
c2sd = 0.0915
c2ed = 0.1368
c3sd = -0.0007
c3ed = 0.0708
c4sd = -0.0368
c4ed = 0.0509
varx = 0.0676%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.14
 Actual Amplitude: 0.139999
 Actual Power: 0.0195998
 Distortion 2H-14H: 0.0006437159%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.3538	end: 11.9664	delta: 0.6126
P2 start: 32.9748	end: 34.7191	delta: 1.7443
P3 start: 54.9671	end: 57.5825	delta: 2.6154
P4 start: 77.2088	end: 80.2981	delta: 3.0893

H3: 2.8911e-06	H15: 0.960139	H15f: 0.0640093
H5: 2.92724e-06	H17: -0.991571	H17f: -0.0583277
H7: 1.5488e-06	H19: -0.0151134	H19f: -0.00079544
H9: -1.74671e-06	H21: 0.00101361	H21f: 4.82674e-05
H11: -2.66113e-06	H23: 0.00109647	H23f: 4.76724e-05
H13: -3.46098e-06	H25: 0.00108078	H25f: 4.32312e-05
	H27: 0.00110783	H27f: 4.10309e-05
	H29: -0.0140739	H29f: -0.000485308
	H31: -0.874814	H31f: -0.0282198

c1sd = 0.4038
 c1ed = -0.138
 c2sd = 0.0792
 c2ed = 0.1148
 c3sd = -0.0042
 c3ed = 0.0539
 c4sd = -0.0329
 c4ed = 0.0398
 varx = 0.0798%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 15/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.15
Actual Amplitude: 0.15
Actual Power: 0.0225
Distortion 2H-14H: 0.0001667479%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.4417 end: 12.0981 delta: 0.6563
P2 start: 32.9442 end: 34.8119 delta: 1.8677
P3 start: 54.8855 end: 57.6866 delta: 2.8011
P4 start: 77.1016 end: 80.4108 delta: 3.3093

H3: -1.68647e-07
H5: 1.31544e-06
H7: 6.50494e-07
H9: -5.0594e-07
H11: -5.51935e-07
H13: -1.94592e-07

H15: 0.951333
H17: -0.993124
H19: -0.0168814
H21: 0.00166758
H23: 0.0017531
H25: 0.00170324
H27: 0.00171688
H29: -0.0154718
H31: -0.851119

H15f: 0.0634222
H17f: -0.058419
H19f: -0.000888497
H21f: 7.94085e-05
H23f: 7.62219e-05
H25f: 6.81295e-05
H27f: 6.35881e-05
H29f: -0.00053351
H31f: -0.0274555

c1sd = 0.5124
c1ed = -0.0651
c2sd = 0.1074
c2ed = 0.1487
c3sd = 0.0021
c3ed = 0.0699
c4sd = -0.0363
c4ed = 0.0487
varx = 0.0894%.

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STEP-LOCKED MAGIC SINEWAVE ANXC16 - 16/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.16
Actual Amplitude: 0.16
Actual Power: 0.0256
Distortion 2H-14H: 0.00366664%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.4737 end: 12.1737 delta: 0.7
P2 start: 32.8949 end: 34.8862 delta: 1.9912
P3 start: 54.7949 end: 57.7822 delta: 2.9873
P4 start: 76.9914 end: 80.5213 delta: 3.5299

H3: 2.13443e-05	H15: 0.945659	H15f: 0.063044
H5: 8.44287e-06	H17: -0.991189	H17f: -0.0583052
H7: 1.694e-06	H19: -0.0191334	H19f: -0.00100702
H9: -3.32023e-06	H21: 0.00200465	H21f: 9.54596e-05
H11: -1.00038e-05	H23: 0.00213328	H23f: 9.27513e-05
H13: -2.65254e-05	H25: 0.00207664	H25f: 8.30657e-05
	H27: 0.00210826	H27f: 7.80837e-05
	H29: -0.0172459	H29f: -0.000594686
	H31: -0.833276	H31f: -0.0268799

c1sd = 0.5653
c1ed = -0.0489
c2sd = 0.1176
c2ed = 0.1635
c3sd = 0.0006
c3ed = 0.0765
c4sd = -0.0415
c4ed = 0.0542
varx = 0.1014%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.17
 Actual Amplitude: 0.17
 Actual Power: 0.0289
 Distortion 2H-14H: 0.00266207%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.4953	end: 12.2388	delta: 0.7435
P2 start: 32.8426	end: 34.9573	delta: 2.1147
P3 start: 54.7029	end: 57.8764	delta: 3.1735
P4 start: 76.8806	end: 80.6314	delta: 3.7508

H3: 1.42854e-05	H15: 0.94037	H15f: 0.0626913
H5: 5.80343e-06	H17: -0.988422	H17f: -0.0581425
H7: -1.91322e-07	H19: -0.0214881	H19f: -0.00113095
H9: -6.44825e-06	H21: 0.00231878	H21f: 0.000110418
H11: -1.07952e-05	H23: 0.00247453	H23f: 0.000107588
H13: -1.7685e-05	H25: 0.00240108	H25f: 9.60434e-05
	H27: 0.00243392	H27f: 9.01451e-05
	H29: -0.0192826	H29f: -0.000664918
	H31: -0.815898	H31f: -0.0263193

c1sd = 0.6092
 c1ed = -0.0476
 c2sd = 0.129
 c2ed = 0.1709
 c3sd = 0.0041
 c3ed = 0.0753
 c4sd = -0.0398
 c4ed = 0.0517
 varx = 0.114%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.18
Actual Amplitude:	0.18
Actual Power:	0.0324
Distortion 2H-14H:	0.000462181%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.5128	end:	12.2999	delta:	0.787
P2 start:	32.7891	end:	35.027	delta:	2.238
P3 start:	54.6102	end:	57.9698	delta:	3.3597
P4 start:	76.7694	end:	80.7413	delta:	3.9719

H3: 2.38916e-06	H15: 0.935133	H15f: 0.0623422
H5: 1.68647e-06	H17: -0.985152	H17f: -0.0579501
H7: 6.6254e-07	H19: -0.0239892	H19f: -0.00126259
H9: -1.40539e-06	H21: 0.00263004	H21f: 0.00012524
H11: -2.22307e-06	H23: 0.00280874	H23f: 0.000122119
H13: -2.33511e-06	H25: 0.00270637	H25f: 0.000108255
	H27: 0.00273501	H27f: 0.000101297
	H29: -0.0214578	H29f: -0.000739925
	H31: -0.798353	H31f: -0.0257533

c1sd = 0.6496
c1ed = -0.0516
c2sd = 0.1406
c2ed = 0.1755
c3sd = 0.0087
c3ed = 0.0713
c4sd = -0.036
c4ed = 0.0467
varx = 0.1273%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.19
Actual Amplitude:	0.19
Actual Power:	0.0361
Distortion 2H-14H:	7.41206e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.3495	end:	12.1791	delta:	0.8296
P2 start:	32.6745	end:	35.0372	delta:	2.3627
P3 start:	54.4887	end:	58.037	delta:	3.5483
P4 start:	76.6485	end:	80.8445	delta:	4.196

H3: 0.0	H15: 0.940354	H15f: 0.0626903
H5: 3.99426e-07	H17: -0.971418	H17f: -0.0571423
H7: 1.71183e-07	H19: -0.0278622	H19f: -0.00146643
H9: -8.87614e-08	H21: 0.00148058	H21f: 7.05037e-05
H11: 1.08934e-07	H23: 0.00178087	H23f: 7.74291e-05
H13: -5.83777e-07	H25: 0.00172801	H25f: 6.91206e-05
	H27: 0.00184153	H27f: 6.82049e-05
	H29: -0.0254502	H29f: -0.000877593
	H31: -0.800556	H31f: -0.0258244

c1sd = 0.5126
c1ed = -0.2471
c2sd = 0.1007
c2ed = 0.111
c3sd = -0.001
c3ed = 0.0266
c4sd = -0.0251
c4ed = 0.018
varx = 0.147%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.2
Actual Amplitude:	0.2
Actual Power:	0.04
Distortion 2H-14H:	0.0001387029%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.5199	end:	12.3937	delta:	0.8738
P2 start:	32.6714	end:	35.1557	delta:	2.4844
P3 start:	54.4189	end:	58.1512	delta:	3.7323
P4 start:	76.5449	end:	80.9597	delta:	4.4148

H3: 5.0594e-07	H15: 0.925908
H5: 0.0	H17: -0.97608
H7: 7.04702e-07	H19: -0.0296964
H9: -5.0594e-07	H21: 0.00299255
H11: 2.06976e-07	H23: 0.00328608
H13: -9.34043e-07	H25: 0.00314972

H15f: 0.0617272
H17f: -0.0574165
H19f: -0.00156297
H21f: 0.000142502
H23f: 0.000142873
H25f: 0.000125989
H27f: 0.000119056
H29f: -0.000906975
H31f: -0.0246737

c1sd = 0.6997
c1ed = -0.0804
c2sd = 0.1455
c2ed = 0.1816
c3sd = 0.0009
c3ed = 0.0692
c4sd = -0.0442
c4ed = 0.0487
varx = 0.1574%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.21
 Actual Amplitude: 0.21
 Actual Power: 0.0440998
 Distortion 2H-14H: 9.87721e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.5325	end: 12.4497	delta: 0.9172
P2 start: 32.6153	end: 35.2226	delta: 2.6072
P3 start: 54.3243	end: 58.2427	delta: 3.9184
P4 start: 76.4328	end: 81.0691	delta: 4.6363

H3: -3.61386e-07	H15: 0.920525	H15f: 0.0613683
H5: -5.78218e-07	H17: -0.971609	H17f: -0.0571535
H7: 3.0976e-07	H19: -0.0326842	H19f: -0.00172022
H9: -2.40924e-07	H21: 0.00326184	H21f: 0.000155326
H11: 5.91359e-07	H23: 0.00362482	H23f: 0.000157601
H13: 8.33968e-08	H25: 0.00346509	H25f: 0.000138604
	H27: 0.0035488	H27f: 0.000131437
	H29: -0.028765	H29f: -0.000991896
	H31: -0.746332	H31f: -0.0240752

c1sd = 0.7345
c1ed = -0.0875
c2sd = 0.1525
c2ed = 0.1854
c3sd = 0.0007
c3ed = 0.0663
c4sd = -0.0449
c4ed = 0.0467
varx = 0.1732%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.22
 Actual Amplitude: 0.22
 Actual Power: 0.0484
 Distortion 2H-14H: 4.70962e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.5433	end: 12.5038	delta: 0.9605
P2 start: 32.5585	end: 35.2884	delta: 2.7299
P3 start: 54.229	end: 58.3335	delta: 4.1045
P4 start: 76.3203	end: 81.1784	delta: 4.858

H3: -1.14986e-07
 H5: 1.37984e-07
 H7: 4.92799e-08
 H9: -7.66576e-08
 H11: -3.13599e-08
 H13: -4.24565e-07

H15: 0.915102
H17: -0.966739
 H19: -0.0358238
 H21: 0.00351392
 H23: 0.00396296
 H25: 0.00377714
 H27: 0.00388991
 H29: -0.0313278
 H31: -0.727506

H15f: 0.0610068
H17f: -0.056867
 H19f: -0.00188546
 H21f: 0.000167329
 H23f: 0.000172303
 H25f: 0.000151085
 H27f: 0.000144071
 H29f: -0.00108027
 H31f: -0.0234679

c1sd = 0.7664
 c1ed = -0.0936
 c2sd = 0.1558
 c2ed = 0.1911
 c3sd = -0.0046
 c3ed = 0.0671
 c4sd = -0.0511
 c4ed = 0.0498
 varx = 0.1898%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.23
 Actual Amplitude: 0.23
 Actual Power: 0.0529001
 Distortion 2H-14H: 9.40944e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.5649	end: 12.5687	delta: 1.0039
P2 start: 32.5052	end: 35.3576	delta: 2.8523
P3 start: 54.1352	end: 58.4256	delta: 4.2904
P4 start: 76.2083	end: 81.288	delta: 5.0797

H3: -2.19974e-07	H15: 0.908883	H15f: 0.0605922
H5: -4.61945e-07	H17: -0.962187	H17f: -0.0565992
H7: 1.41412e-07	H19: -0.0389963	H19f: -0.00205244
H9: 3.66623e-08	H21: 0.00388871	H21f: 0.000185177
H11: 6.89917e-07	H23: 0.0044255	H23f: 0.000192413
H13: 3.55342e-07	H25: 0.00420672	H25f: 0.000168269
	H27: 0.00434103	H27f: 0.000160779
	H29: -0.0338314	H29f: -0.0011666
	H31: -0.0707024	H31f: -0.0228072

c1sd = 0.81
 c1ed = -0.0912
 c2sd = 0.1652
 c2ed = 0.1976
 c3sd = -0.0047
 c3ed = 0.0654
 c4sd = -0.0526
 c4ed = 0.0489
 varx = 0.2067%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 24/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.24
Actual Amplitude: 0.24
Actual Power: 0.0575998
Distortion 2H-14H: 5.529e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.3701 end: 12.4153 delta: 1.0452
P2 start: 32.377 end: 35.3539 delta: 2.9769
P3 start: 54.0058 end: 58.4858 delta: 4.48
P4 start: 76.0837 end: 81.3898 delta: 5.3061

H3: 4.21617e-07	H15: 0.915245	H15f: 0.0610164
H5: 1.26485e-07	H17: -0.945181	H17f: -0.0555989
H7: 2.25866e-07	H19: -0.0439989	H19f: -0.00231573
H9: -1.40539e-07	H21: 0.00205605	H21f: 9.7907e-05
H11: -5.74933e-08	H23: 0.00284296	H23f: 0.000123607
H13: -1.94593e-07	H25: 0.00273422	H25f: 0.000109369
	H27: 0.00304693	H27f: 0.000112849
	H29: -0.0391753	H29f: -0.00135087
	H31: -0.709588	H31f: -0.0228899

c1sd = 0.6458
c1ed = -0.3318
c2sd = 0.124
c2ed = 0.1068
c3sd = -0.0037
c3ed = -0.0047
c4sd = -0.0234
c4ed = -0.003
varx = 0.232%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.25
Actual Amplitude:	0.25
Actual Power:	0.0625
Distortion 2H-14H:	3.47503e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.5984	end:	12.6888	delta:	1.0904
P2 start:	32.395	end:	35.4916	delta:	3.0966
P3 start:	53.9451	end:	58.6072	delta:	4.6621
P4 start:	75.9829	end:	81.5066	delta:	5.5237

H3: -1.01188e-07	
H5: -2.42851e-07	
H7: -8.67326e-08	
H9: 1.68647e-07	
H11: 8.27902e-08	
H13: -9.34043e-08	

H15: 0.89657	
H17: -0.951681	
H19: -0.0457952	
H21: 0.00455521	
H23: 0.00532268	
H25: 0.00503257	
H27: 0.00523337	
H29: -0.0391443	
H31: -0.665894	

H15f: 0.0597713	
H17f: -0.0559813	
H19f: -0.00241027	
H21f: 0.000216915	
H23f: 0.000231421	
H25f: 0.000201303	
H27f: 0.000193829	
H29f: -0.0013498	
H31f: -0.0214805	

c1sd = 0.8857	
c1ed = -0.0914	
c2sd = 0.1752	
c2ed = 0.2113	
c3sd = -0.0147	
c3ed = 0.0671	
c4sd = -0.0657	
c4ed = 0.0552	
varx = 0.2428%.	

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 26/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.26
Actual Amplitude: 0.26
Actual Power: 0.0676
Distortion 2H-14H: 7.38797e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.6303 end: 12.7641 delta: 1.1338
P2 start: 32.3451 end: 35.5633 delta: 3.2182
P3 start: 53.8522 end: 58.6997 delta: 4.8475
P4 start: 75.8708 end: 81.6164 delta: 5.7456

H3: 4.86481e-07	H15: 0.889286	H15f: 0.0592858
H5: 2.91888e-07	H17: -0.946859	H17f: -0.0556976
H7: 0.0	H19: -0.0492195	H19f: -0.0025905
H9: 1.94592e-07	H21: 0.005093	H21f: 0.000242524
H11: -2.38818e-07	H23: 0.00598346	H23f: 0.00026015
H13: -3.59247e-07	H25: 0.00563473	H25f: 0.000225389
	H27: 0.00586186	H27f: 0.000217106
	H29: -0.0416577	H29f: -0.00143647
	H31: -0.643135	H31f: -0.0207463

c1sd = 0.9412
c1ed = -0.0834
c2sd = 0.1927
c2ed = 0.2157
c3sd = -0.0069
c3ed = 0.0588
c4sd = -0.0589
c4ed = 0.0461
varx = 0.2611%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 27/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.27
Actual Amplitude: 0.27
Actual Power: 0.0729
Distortion 2H-14H: 3.00167e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.636 end: 12.8129 delta: 1.1769
P2 start: 32.2858 end: 35.6256 delta: 3.3398
P3 start: 53.7546 end: 58.788 delta: 5.0334
P4 start: 75.7569 end: 81.7252 delta: 5.9683

H3: 1.87385e-07
H5: 1.68647e-07
H7: -1.20462e-07
H9: 6.24617e-08
H11: -2.55525e-08
H13: -8.64855e-08

H15: 0.88342
H17: -0.940287
H19: -0.0530266
H21: 0.00530077
H23: 0.00635609
H25: 0.00597442
H27: 0.00625816
H29: -0.0446153
H31: -0.622863

H15f: 0.0588947
H17f: -0.055311
H19f: -0.00279087
H21f: 0.000252417
H23f: 0.000276352
H25f: 0.000238977
H27f: 0.000231784
H29f: -0.00153846
H31f: -0.0200924

c1sd = 0.9679
c1ed = -0.094
c2sd = 0.1927
c2ed = 0.2187
c3sd = -0.0156
c3ed = 0.0582
c4sd = -0.0681
c4ed = 0.0501
varx = 0.2812%

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and development assistance available via done@tinaja.com or www.tinaja.com/magn01.html

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.28
Actual Amplitude: 0.28
Actual Power: 0.0784
Distortion 2H-14H: 6.05956e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.6709 end: 12.8913 delta: 1.2204
P2 start: 32.2369 end: 35.6978 delta: 3.4609
P3 start: 53.6617 end: 58.8803 delta: 5.2186
P4 start: 75.6444 end: 81.8349 delta: 6.1905

H3: 4.51732e-07
H5: 1.08416e-07
H7: -2.71039e-07
H9: 3.01155e-08
H11: 2.21759e-07
H13: 1.66793e-07

H15: 0.87566
H17: -0.935086
H19: -0.0566318
H21: 0.00590793
H23: 0.00711574
H25: 0.00666092
H27: 0.00697482
H29: -0.0471544
H31: -0.59918

H15f: 0.0583774
H17f: -0.055005
H19f: -0.00298062
H21f: 0.00028133
H23f: 0.00030938
H25f: 0.000266437
H27f: 0.000258327
H29f: -0.00162601
H31f: -0.0193284

c1sd = 1.0268
c1ed = -0.0841
c2sd = 0.2123
c2ed = 0.2224
c3sd = -0.0061
c3ed = 0.048
c4sd = -0.0596
c4ed = 0.039
varx = 0.3005%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.29
Actual Amplitude: 0.29
Actual Power: 0.0841
Distortion 2H-14H: 3.20153e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.6268 end: 12.8893 delta: 1.2625
P2 start: 32.159 end: 35.7418 delta: 3.5828
P3 start: 53.5546 end: 58.9601 delta: 5.4055
P4 start: 75.5268 end: 81.9418 delta: 6.415

H3: 8.7231e-08
H5: -1.04677e-07
H7: -3.73847e-08
H9: 2.9077e-08
H11: -4.75806e-08
H13: 2.81823e-07

H15: 0.872508
H17: -0.925151
H19: -0.0612214
H21: 0.00539098
H23: 0.00687167
H25: 0.00644398
H27: 0.00689428
H29: -0.0510594
H31: -0.583545

H15f: 0.0581672
H17f: -0.0544206
H19f: -0.00322218
H21f: 0.000256713
H23f: 0.000298768
H25f: 0.000257759
H27f: 0.000255344
H29f: -0.00176067
H31f: -0.018824

c1sd = 1.0159
c1ed = -0.1807
c2sd = 0.229
c2ed = 0.1718
c3sd = 0.0285
c3ed = -0.0138
c4sd = -0.0102
c4ed = -0.0212
varx = 0.3242%

STEP-LOCKED MAGIC SINEWAVE ANXC16 - 30/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.3
Actual Amplitude: 0.3
Actual Power: 0.09
Distortion 2H-14H: 4.58136e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.7318 end: 13.039 delta: 1.3071
P2 start: 32.1358 end: 35.8382 delta: 3.7024
P3 start: 53.4735 end: 59.0624 delta: 5.5889
P4 start: 75.4183 end: 82.054 delta: 6.6357

H3: -3.37293e-07
H5: -1.01188e-07
H7: -1.80693e-07
H9: 1.96754e-07
H11: 9.19891e-08
H13: -7.78369e-08

H15: 0.860245
H17: -0.923372
H19: -0.0642268
H21: 0.00706403
H23: 0.00863495
H25: 0.00802389
H27: 0.00841476
H29: -0.0524329
H31: -0.552074

H15f: 0.0573497
H17f: -0.054316
H19f: -0.00338036
H21f: 0.000336382
H23f: 0.000375433
H25f: 0.000320955
H27f: 0.000311658
H29f: -0.00180803
H31f: -0.0178088

c1sd = 1.1338
c1ed = -0.0678
c2sd = 0.2426
c2ed = 0.2314
c3sd = 0.0023
c3ed = 0.0336
c4sd = -0.0539
c4ed = 0.0261
varx = 0.3412%

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 31/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.31
Actual Amplitude: 0.31
Actual Power: 0.0961
Distortion 2H-14H: 2.42551e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.7177 end: 13.0674 delta: 1.3496
P2 start: 32.0685 end: 35.8918 delta: 3.8233
P3 start: 53.3709 end: 59.146 delta: 5.775
P4 start: 75.3019 end: 82.1618 delta: 6.8599

H3: -8.16032e-08	H15: 0.855026	H15f: 0.0570018
H5: 0.0	H17: -0.914599	H17f: -0.0538
H7: 3.49728e-08	H19: -0.0687278	H19f: -0.00361725
H9: 0.0	H21: 0.00693849	H21f: 0.000330404
H11: 2.22554e-07	H23: 0.00879614	H23f: 0.000382441
H13: -3.7663e-08	H25: 0.00817128	H25f: 0.000326851
	H27: 0.00868068	H27f: 0.000321507
	H29: -0.059247	H29f: -0.00192844
	H31: -0.53282	H31f: -0.0171877

c1sd = 1.1298
c1ed = -0.068
c2sd = 0.2039
c2ed = 0.2564
c3sd = -0.0574
c3ed = 0.0743
c4sd = -0.1197
c4ed = 0.0834
varx = 0.3647%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.32
 Actual Amplitude: 0.32
 Actual Power: 0.1024
 Distortion 2H-14H: 3.26144e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.7293	end: 13.1218	delta: 1.3926
P2 start: 32.0106	end: 35.9542	delta: 3.9436
P3 start: 53.2726	end: 59.2331	delta: 5.9605
P4 start: 75.1868	end: 82.2706	delta: 7.0837

H3: -7.90531e-08
 H5: 2.37159e-07
 H7: -2.03279e-07
 H9: 2.6351e-08
 H11: 4.31199e-08
 H13: 0.0

H15: 0.848123
H17: -0.907014
 H19: -0.0730185
 H21: 0.00720576
 H23: 0.00933803
 H25: 0.00865238
 H27: 0.00925217
 H29: -0.0589906
 H31: -0.510715

H15f: 0.0565415
H17f: -0.0533538
 H19f: -0.00384308
 H21f: 0.000343131
 H23f: 0.000406001
 H25f: 0.000346095
 H27f: 0.000342673
 H29f: -0.00203416
 H31f: -0.0164747

c1sd = 1.1643
 c1ed = -0.079
 c2sd = 0.2114
 c2ed = 0.2534
 c3sd = -0.0578
 c3ed = 0.0635
 c4sd = -0.1193
 c4ed = 0.0767
 varx = 0.3874%.0.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.33
Actual Amplitude:	0.33
Actual Power:	0.1089
Distortion 2H-14H:	7.28398e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.7687	end: 13.2048	delta: 1.4361
P2 start:	31.9632	end: 36.0264	delta: 4.0632
P3 start:	53.1791	end: 59.3241	delta: 6.1451
P4 start:	75.0733	end: 82.3802	delta: 7.3069

H3: 6.89918e-07	H15: 0.839397
H5: -4.59945e-08	H17: -0.900752
H7: -9.85597e-08	H19: -0.0770505
H9: -1.27763e-07	H21: 0.00794497
H11: 1.46346e-07	H23: 0.0103259
H13: -7.07608e-08	H25: 0.00952546
	H27: 0.0101718
	H29: -0.0615257
	H31: -0.485662

H15f: 0.0559598
H17f: -0.0529854
H19f: -0.00405529
H21f: 0.000378332
H23f: 0.000448951
H25f: 0.000381018
H27f: 0.000376734
H29f: -0.00212158
H31f: -0.0156665

c1sd = 1.2263
c1ed = -0.0604
c2sd = 0.2284
c2ed = 0.2612
c3sd = -0.0549
c3ed = 0.0581
c4sd = -0.1191
c4ed = 0.0726
varx = 0.4091%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 34/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.34
Actual Amplitude: 0.34
Actual Power: 0.1156
Distortion 2H-14H: 6.08104e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.7663 end: 13.2449 delta: 1.4786
P2 start: 31.8997 end: 36.0829 delta: 4.1832
P3 start: 53.0775 end: 59.4082 delta: 6.3307
P4 start: 74.9566 end: 82.4884 delta: 7.5318

H3: -7.44029e-08
H5: -2.6785e-07
H7: 2.86983e-07
H9: -2.4801e-07
H11: 3.85542e-07
H13: 0.0

H15: 0.833072
H17: -0.89187
H19: -0.0817165
H21: 0.00795433
H23: 0.0106901
H25: 0.00984921
H27: 0.0106298
H29: -0.0649155
H31: -0.464687

H15f: 0.0555382
H17f: -0.0524629
H19f: -0.00430087
H21f: 0.000378778
H23f: 0.000464786
H25f: 0.000393968
H27f: 0.000393695
H29f: -0.00223847
H31f: -0.0149899

c1sd = 1.2637
c1ed = -0.1334
c2sd = 0.278
c2ed = 0.2046
c3sd = 0.0127
c3ed = -0.027
c4sd = -0.0362
c4ed = -0.0188
varx = 0.4336%.

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STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 35/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.35
Actual Amplitude: 0.35
Actual Power: 0.1225
Distortion 2H-14H: 3.04105e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.8558 end: 13.3793 delta: 1.5235
P2 start: 31.8719 end: 36.1732 delta: 4.3013
P3 start: 52.9929 end: 59.5065 delta: 6.5136
P4 start: 74.8461 end: 82.5998 delta: 7.7537

H3: -1.44554e-07 H15: 0.821028
H5: 0.0 H17: -0.887955
H7: -1.5488e-07 H19: -0.0851945
H9: -2.40924e-08 H21: 0.00966804
H11: 2.16831e-07 H23: 0.0125909
H13: 0.0 H25: 0.0115006
 H27: 0.0122285
 H29: -0.0663664
 H31: -0.434628

H15f: 0.0547352
H17f: -0.0522326
H19f: -0.00448392
H21f: 0.000460383
H23f: 0.00054743
H25f: 0.000460023
H27f: 0.000452908
H29f: -0.0022885
H31f: -0.0140202

c1sd = 1.3733
c1ed = -0.0563
c2sd = 0.3075
c2ed = 0.2375
c3sd = 0.0139
c3ed = -0.0145
c4sd = -0.0455
c4ed = -0.0086
varx = 0.4532%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 36/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.36
Actual Amplitude: 0.36
Actual Power: 0.1296
Distortion 2H-14H: 2.61472e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.791 end: 13.3552 delta: 1.5641
P2 start: 31.7837 end: 36.2053 delta: 4.4216
P3 start: 52.8786 end: 59.5796 delta: 6.701
P4 start: 74.7242 end: 82.7057 delta: 7.9815

H3: -1.40539e-07 H15: 0.818254
H5: 2.10808e-07 H17: -0.875032
H7: 6.02309e-08 H19: -0.0909406
H9: -2.34231e-08 H21: 0.00844087
H11: 0.0 H23: 0.0119296
H13: 0.0 H25: 0.0109349
 H27: 0.0119665
 H29: -0.07111518
 H31: -0.419547

H15f: 0.0545503
H17f: -0.0514725
H19f: -0.00478635
H21f: 0.000401946
H23f: 0.000518677
H25f: 0.000437395
H27f: 0.000443203
H29f: -0.00245351
H31f: -0.0135338

c1sd = 1.3385
c1ed = -0.1659
c2sd = 0.3047
c2ed = 0.1843
c3sd = 0.0274
c3ed = -0.0693
c4sd = -0.0166
c4ed = -0.0535
varx = 0.4824%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.37
 Actual Amplitude: 0.37
 Actual Power: 0.1369
 Distortion 2H-14H: 5.53588e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 11.827	end: 13.4346	delta: 1.6076
P2 start: 31.7348	end: 36.2748	delta: 4.54
P3 start: 52.7832	end: 59.6684	delta: 6.8852
P4 start: 74.6092	end: 82.8151	delta: 8.2059

H3: -2.73481e-07	H15: 0.80922	H15f: 0.053948
H5: -2.87155e-07	H17: -0.867598	H17f: -0.0510352
H7: 1.17206e-07	H19: -0.0953475	H19f: -0.00501829
H9: 1.1395e-07	H21: 0.00912563	H21f: 0.000434554
H11: 2.42404e-07	H23: 0.012986	H23f: 0.000564608
H13: -2.52444e-07	H25: 0.0118506	H25f: 0.000474024
	H27: 0.0129668	H27f: 0.000480252
	H29: -0.0737453	H29f: -0.00254294
	H31: -0.394683	H31f: -0.0127317

c1sd = 1.3813
c1ed = -0.1058
c2sd = 0.2752
c2ed = 0.2344
c3sd = -0.039
c3ed = -0.0095
c4sd = -0.0974
c4ed = 0.0217
varx = 0.5061%

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 38/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.38
Actual Amplitude: 0.38
Actual Power: 0.1444
Distortion 2H-14H: 2.91567e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.8717 end: 13.523 delta: 1.6513
P2 start: 31.6895 end: 36.3473 delta: 4.6578
P3 start: 52.6891 end: 59.7582 delta: 7.0691
P4 start: 74.4944 end: 82.9248 delta: 8.4304

H3: 0.0	H15: 0.799535	H15f: 0.0533023
H5: -1.5977e-07	H17: -0.860421	H17f: -0.050613
H7: 1.42652e-07	H19: -0.0996877	H19f: -0.00524672
H9: -8.87613e-08	H21: 0.0100055	H21f: 0.000476453
H11: 1.2709e-07	H23: 0.014242	H23f: 0.000619219
H13: 1.229e-07	H25: 0.0129305	H25f: 0.00051722
	H27: 0.0141128	H27f: 0.000522698
	H29: -0.076106	H29f: -0.00262435
	H31: -0.369095	H31f: -0.0119063

c1sd = 1.437
c1ed = -0.0488
c2sd = 0.2613
c2ed = 0.2755
c3sd = -0.086
c3ed = 0.0334
c4sd = -0.1567
c4ed = 0.0759
varx = 0.5295%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.39
Actual Amplitude:	0.39
Actual Power:	0.1521
Distortion 2H-14H:	2.15374e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.8618	end: 13.5551	delta: 1.6932
P2 start:	31.6222	end: 36.3985	delta: 4.7762
P3 start:	52.584	end: 59.8386	delta: 7.2545
P4 start:	74.3752	end: 83.0326	delta: 8.6574

H3: -1.29728e-07	H15: 0.79305	H15f: 0.05287
H5: -7.78368e-08	H17: -0.849906	H17f: -0.0499945
H7: 5.55977e-08	H19: -0.104911	H19f: -0.00552165
H9: 1.08107e-07	H21: 0.00974191	H21f: 0.0004639
H11: 8.8451e-08	H23: 0.014536	H23f: 0.000631999
H13: 2.99372e-08	H25: 0.0131863	H25f: 0.000527454
	H27: 0.014595	H27f: 0.000540555
	H29: -0.079742	H29f: -0.00274973
	H31: -0.348626	H31f: -0.011246

c1sd = 1.4711
c1ed = -0.1419
c2sd = 0.3192
c2ed = 0.2015
c3sd = -0.0038
c3ed = -0.0736
c4sd = -0.055
c4ed = -0.0372
varx = 0.55689.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 40/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.4
Actual Amplitude: 0.4
Actual Power: 0.16
Distortion 2H-14H: 2.66058e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.932 end: 13.67 delta: 1.738
P2 start: 31.5874 end: 36.4802 delta: 4.8928
P3 start: 52.4946 end: 59.9318 delta: 7.4372
P4 start: 74.2617 end: 83.1431 delta: 8.8814

H3: 6.32425e-08	H15: 0.781564	H15f: 0.0521043
H5: 3.79455e-08	H17: -0.843735	H17f: -0.0496315
H7: 5.42079e-08	H19: -0.108974	H19f: -0.00573547
H9: 2.10808e-08	H21: 0.0111963	H21f: 0.000533159
H11: 8.62398e-08	H23: 0.016358	H23f: 0.000711218
H13: -2.33511e-07	H25: 0.014732	H25f: 0.000589282
	H27: 0.0161436	H27f: 0.000597912
	H29: -0.0814037	H29f: -0.00280702
	H31: -0.320968	H31f: -0.0103538

c1sd = 1.5515
c1ed = -0.0561
c2sd = 0.3134
c2ed = 0.2541
c3sd = -0.0497
c3ed = -0.024
c4sd = -0.1171
c4ed = 0.0219
varx = 0.5793%.

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and development assistance available via done@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.41
Actual Amplitude:	0.41
Actual Power:	0.1681
Distortion 2H-14H:	2.8964e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.7656	end: 13.5394	delta: 1.7738
P2 start:	31.4561	end: 36.4696	delta: 5.0136
P3 start:	52.357	end: 59.985	delta: 7.628
P4 start:	74.1295	end: 83.2456	delta: 9.1161

H3: -6.17e-08	H15: 0.784296
H5: 0.0	H17: -0.823812
H7: -1.05771e-07	H19: -0.116632
H9: -2.05667e-08	H21: 0.00747968
H11: 2.35582e-07	H23: 0.0137193
H13: 1.13908e-07	H25: 0.0125048

H27: 0.0146473	H29: -0.0890185
H31: -0.314447	

H15f: 0.0522864	H17f: -0.0484595
H19f: -0.00613852	H21f: 0.000356175
H23f: 0.00059649	H25f: 0.000500191
H27f: 0.000542491	H29f: -0.0030696
H31f: -0.0101435	

c1sd = 1.4077
c1ed = -0.251
c2sd = 0.2465
c2ed = 0.1792
c3sd = -0.0909
c3ed = -0.067
c4sd = -0.1357
c4ed = 0.0107
varx = 0.6172%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.42
Actual Amplitude:	0.42
Actual Power:	0.1764
Distortion 2H-14H:	3.16614e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	11.8619	end:	13.6812	delta:	1.8193
P2 start:	31.4312	end:	36.56	delta:	5.1288
P3 start:	52.2717	end:	60.0813	delta:	7.8095
P4 start:	74.017	end:	83.3569	delta:	9.3399

H3: -6.0231e-08	H15: 0.771069	H15f: 0.0514046
H5: 3.61386e-08	H17: -0.818694	H17f: -0.0481584
H7: -1.5488e-07	H19: -0.12057	H19f: -0.0063458
H9: 2.61001e-07	H21: 0.00935015	H21f: 0.000445245
H11: 4.92799e-08	H23: 0.0160027	H23f: 0.00069577
H13: 2.77989e-08	H25: 0.0144487	H25f: 0.000577948
	H27: 0.0165675	H27f: 0.00061361
	H29: -0.0899921	H29f: -0.00310318
	H31: -0.284758	H31f: -0.00918574

c1sd = 1.5225
c1ed = -0.1619
c2sd = 0.2743
c2ed = 0.2169
c3sd = -0.0974
c3ed = -0.0496
c4sd = -0.1553
c4ed = 0.0291
varx = 0.6391%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.43
Actual Amplitude:	0.43
Actual Power:	0.1849
Distortion 2H-14H:	3.62126e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.0095	end: 13.8772	delta: 1.8677
P2 start:	31.4289	end: 36.6715	delta: 5.2426
P3 start:	52.1975	end: 60.1862	delta: 7.9887
P4 start:	73.9085	end: 83.4699	delta: 9.5614

H3: -2.35321e-07	H15: 0.754535	H15f: 0.0503024
H5: -3.52981e-08	H17: -0.816318	H17f: -0.0480187
H7: 1.51278e-07	H19: -0.123543	H19f: -0.00650226
H9: -1.1766e-07	H21: 0.0126582	H21f: 0.000602774
H11: 1.76491e-07	H23: 0.0195272	H23f: 0.00084901
H13: -8.14572e-08	H25: 0.0173866	H25f: 0.000695465
	H27: 0.0192536	H27f: 0.000713097
	H29: -0.0894305	H29f: -0.00308381
	H31: -0.251156	H31f: -0.00810179

c1sd = 1.6958
c1ed = -0.0391
c2sd = 0.3452
c2ed = 0.2551
c3sd = -0.062
c3ed = -0.0542
c4sd = -0.1344
c4ed = 0.0129
varx = 0.6572%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.44
Actual Amplitude: 0.44
Actual Power: 0.1936
Distortion 2H-14H: 1.7631e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 11.9746 end: 13.8826 delta: 1.908
P2 start: 31.3501 end: 36.7097 delta: 5.3596
P3 start: 52.0848 end: 60.2594 delta: 8.1746
P4 start: 73.7848 end: 83.5768 delta: 9.792

H3: 5.74931e-08	H15: 0.749027	H15f: 0.0499351
H5: 0.0	H17: -0.803268	H17f: -0.0472511
H7: -7.39198e-08	H19: -0.129554	H19f: -0.00681862
H9: -7.66575e-08	H21: 0.0115851	H21f: 0.00051671
H11: 1.2544e-07	H23: 0.0193402	H23f: 0.000840879
H13: -2.65353e-08	H25: 0.0172432	H25f: 0.000689728
	H27: 0.0195258	H27f: 0.000723179
	H29: -0.0937067	H29f: -0.00323127
	H31: -0.233366	H31f: -0.00752794

c1sd = 1.6866
c1ed = -0.107
c2sd = 0.3397
c2ed = 0.2201
c3sd = -0.0651
c3ed = -0.0907
c4sd = -0.1288
c4ed = -0.0096
varx = 0.6881%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 45/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.45
Actual Amplitude: 0.45
Actual Power: 0.2025
Distortion 2H-14H: 5.16035e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.0862 end: 14.0416 delta: 1.9554
P2 start: 31.3341 end: 36.8072 delta: 5.4731
P3 start: 52.0031 end: 60.3576 delta: 8.3545
P4 start: 73.673 end: 83.6886 delta: 10.0157

H3: -2.81078e-07	H15: 0.734429	H15f: 0.0489619
H5: -1.01188e-07	H17: -0.798434	H17f: -0.0469667
H7: -1.92739e-07	H19: -0.133042	H19f: -0.00700219
H9: 2.62339e-07	H21: 0.014243	H21f: 0.000678238
H11: 6.13261e-08	H23: 0.0223573	H23f: 0.000972055
H13: 2.59456e-07	H25: 0.019707	H25f: 0.000788279
	H27: 0.0218262	H27f: 0.000808377
	H29: -0.0938688	H29f: -0.00323686
	H31: -0.203746	H31f: -0.00657244

c1sd = 1.824
c1ed = -0.0214
c2sd = 0.3972
c2ed = 0.2441
c3sd = -0.0369
c3ed = -0.1024
c4sd = -0.111
c4ed = -0.0274
varx = 0.7086%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.46
 Actual Amplitude: 0.46
 Actual Power: 0.2116
 Distortion 2H-14H: 3.67461e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.0818	end: 14.0789	delta: 1.9971
P2 start: 31.2681	end: 36.8567	delta: 5.5886
P3 start: 51.8959	end: 60.4349	delta: 8.5389
P4 start: 73.5507	end: 83.7965	delta: 10.2458

H3: 2.19974e-07	H15: 0.726852	H15f: 0.0484568
H5: -9.89882e-08	H17: -0.786737	H17f: -0.0462786
H7: -2.12118e-07	H19: -0.138645	H19f: -0.00729708
H9: 3.66623e-08	H21: 0.0138654	H21f: 0.000660257
H11: 1.19986e-07	H23: 0.0228556	H23f: 0.00099372
H13: 1.26908e-07	H25: 0.0201195	H25f: 0.00080478
	H27: 0.0225715	H27f: 0.000835983
	H29: -0.097225	H29f: -0.00335258
	H31: -0.183929	H31f: -0.00593319

c1sd = 1.859
 c1ed = -0.0962
 c2sd = 0.4433
 c2ed = 0.1815
 c3sd = 0.0237
 c3ed = -0.1929
 c4sd = -0.0354
 c4ed = -0.1174
 varx = 0.73799.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.47
 Actual Amplitude: 0.47
 Actual Power: 0.2209
 Distortion 2H-14H: 4.02208e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.0275	end: 14.0634	delta: 2.0359
P2 start: 31.18	end: 36.8847	delta: 5.7047
P3 start: 51.7771	end: 60.5025	delta: 8.7254
P4 start: 73.4234	end: 83.9028	delta: 10.4793

H3: -2.15294e-07	H15: 0.722216	H15f: 0.0481478
H5: 6.45881e-08	H17: -0.771961	H17f: -0.0454095
H7: -2.07605e-07	H19: -0.145184	H19f: -0.00764127
H9: -1.79411e-08	H21: 0.0120719	H21f: 0.000574853
H11: 2.49545e-07	H23: 0.0222133	H23f: 0.000965796
H13: 7.45247e-08	H25: 0.019617	H25f: 0.00078468
	H27: 0.0226597	H27f: 0.000839249
	H29: -0.102037	H29f: -0.0035185
	H31: -0.168208	H31f: -0.00542606

c1sd = 1.816
c1ed = -0.1438
c2sd = 0.3872
c2ed = 0.1774
c3sd = -0.0471
c3ed = -0.1733
c4sd = -0.106
c4ed = -0.0678
varx = 0.771116.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 48/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.48
Actual Amplitude: 0.48
Actual Power: 0.2304
Distortion 2H-14H: 3.17503e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.1067 end: 14.1888 delta: 2.0821
P2 start: 31.1505 end: 36.9678 delta: 5.8174
P3 start: 51.6875 end: 60.5934 delta: 8.9059
P4 start: 73.3074 end: 84.0134 delta: 10.706

H3: 0.0	H15: 0.709319	H15f: 0.0472879
H5: 1.58106e-07	H17: -0.764699	H17f: -0.0449823
H7: 2.25866e-07	H19: -0.149346	H19f: -0.00786034
H9: -1.22972e-07	H21: 0.0138977	H21f: 0.000661795
H11: 1.43733e-08	H23: 0.0246596	H23f: 0.00107216
H13: -9.72962e-08	H25: 0.0215872	H25f: 0.000863487
	H27: 0.0246179	H27f: 0.000911774
	H29: -0.102863	H29f: -0.00354699
	H31: -0.142451	H31f: -0.00459518

c1sd = 1.9227
c1ed = -0.0969
c2sd = 0.4362
c2ed = 0.1821
c3sd = -0.0192
c3ed = -0.1998
c4sd = -0.0835
c4ed = -0.0957
varx = 0.7945%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.49
Actual Amplitude:	0.49
Actual Power:	0.2401
Distortion 2H-14H:	4.1855e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.2088	end: 14.339	delta: 2.1302
P2 start:	31.1322	end: 37.0612	delta: 5.929
P3 start:	51.6034	end: 60.6883	delta: 9.0849
P4 start:	73.1932	end: 84.1249	delta: 10.9317

H3: 5.16265e-08	
H5: -3.09759e-08	
H7: -8.85026e-08	
H9: -3.61386e-07	
H11: 1.1264e-07	
H13: -1.42966e-07	

H15: 0.694878	
H17: -0.758588	
H19: -0.152967	
H21: 0.0165342	
H23: 0.0277977	
H25: 0.0240633	
H27: 0.0269273	
H29: -0.10286	
H31: -0.115625	

H15f: 0.0463252	
H17f: -0.0446228	
H19f: -0.00805089	
H21f: 0.000787341	
H23f: 0.00120859	
H25f: 0.000962531	
H27f: 0.000997306	
H29f: -0.0035469	
H31f: -0.00372983	

c1sd = 2.0469	
c1ed = -0.0096	
c2sd = 0.4808	
c2ed = 0.2127	
c3sd = -0.0093	
c3ed = -0.199	
c4sd = -0.0867	
c4ed = -0.0952	
varx = 0.8159%.	

STEP-LOCKED MAGIC SINEWAVE ANXC16 - 50/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.5
Actual Amplitude: 0.5
Actual Power: 0.25
Distortion 2H-14H: 2.45e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.1616 end: 14.3303 delta: 2.1688
P2 start: 31.046 end: 37.0895 delta: 6.0435
P3 start: 51.4841 end: 60.7547 delta: 9.2706
P4 start: 73.0645 end: 84.2314 delta: 11.1669

H3: -5.0594e-08	H15: 0.689562	H15f: 0.0459708
H5: 0.0	H17: -0.743657	H17f: -0.0437445
H7: 0.0	H19: -0.159599	H19f: -0.00839993
H9: 0.0	H21: 0.014662	H21f: 0.00069819
H11: 2.20774e-07	H23: 0.0272747	H23f: 0.00118586
H13: 9.34043e-08	H25: 0.0236726	H25f: 0.000946906
	H27: 0.0272023	H27f: 0.00100749
	H29: -0.10737	H29f: -0.00370241
	H31: -0.100184	H31f: -0.00323173

c1sd = 2.0229
c1ed = -0.0846
c2sd = 0.4609
c2ed = 0.1746
c3sd = -0.0294
c3ed = -0.2319
c4sd = -0.0984
c4ed = -0.1058
varx = 0.8494%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.51
Actual Amplitude:	0.51
Actual Power:	0.2601
Distortion 2H-14H:	2.85592e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.2399	end: 14.4556	delta: 2.2157
P2 start:	31.0175	end: 37.1721	delta: 6.1546
P3 start:	51.3939	end: 60.844	delta: 9.4501
P4 start:	72.947	end: 84.3421	delta: 11.3951

H3: -2.4801e-07	H15: 0.676408
H5: 2.97612e-08	H17: -0.735831
H7: -8.50319e-08	H19: -0.163701
H9: 9.92039e-08	H21: 0.0166173
H11: 0.0	H23: 0.0299428
H13: -4.57864e-08	H25: 0.02575
	H27: 0.0292428
	H29: -0.107897
	H31: -0.0761788

H15f: 0.0450939
H17f: -0.0432842
H19f: -0.00861585
H21f: 0.000791298
H23f: 0.00130186
H25f: 0.00103
H27f: 0.00108307
H29f: -0.0037206
H31f: -0.00245738

c1sd = 2.1201
c1ed = -0.0129
c2sd = 0.486
c2ed = 0.2036
c3sd = -0.0393
c3ed = -0.2228
c4sd = -0.1211
c4ed = -0.0898
varx = 0.87299.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.52
 Actual Amplitude: 0.52
 Actual Power: 0.2704
 Distortion 2H-14H: 4.09047e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.1546	end: 14.4057	delta: 2.2511
P2 start: 30.9129	end: 37.1818	delta: 6.2689
P3 start: 51.264	end: 60.9015	delta: 9.6375
P4 start: 72.8129	end: 84.4474	delta: 11.6345

H3: -4.86481e-08	H15: 0.67322	H15f: 0.0448813
H5: 1.75133e-07	H17: -0.718326	H17f: -0.0422545
H7: -8.33967e-08	H19: -0.17114	H19f: -0.00900739
H9: -1.62166e-08	H21: 0.0133763	H21f: 0.000636969
H11: -3.44959e-07	H23: 0.0284161	H23f: 0.00123548
H13: 8.98118e-08	H25: 0.0245946	H25f: 0.000983783
	H27: 0.0290655	H27f: 0.0010765
	H29: -0.113583	H29f: -0.00391665
	H31: -0.063925	H31f: -0.0020621

c1sd = 2.0416
c1ed = -0.0822
c2sd = 0.4008
c2ed = 0.1939
c3sd = -0.1401
c3ed = -0.1944
c4sd = -0.221
c4ed = -0.0187
varx = 0.9097%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 53/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.53
Actual Amplitude: 0.53
Actual Power: 0.2809
Distortion 2H-14H: 3.67968e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.2481 end: 14.5475 delta: 2.2994
P2 start: 30.8917 end: 37.2701 delta: 6.3785
P3 start: 51.1766 end: 60.9922 delta: 9.8156
P4 start: 72.6957 end: 84.5586 delta: 11.8629

H3: -1.90921e-07 H15: 0.658983
H5: 2.86381e-08 H17: -0.711069
H7: 6.13674e-08 H19: -0.174991
H9: 9.54604e-08 H21: 0.0157637
H11: 2.60346e-07 H23: 0.0315513
H13: -1.32176e-07 H25: 0.0270127
 H27: 0.0313772
 H29: -0.113423
 H31: -0.0399569

H15f: 0.0439322
H17f: -0.0418276
H19f: -0.00921003
H21f: 0.000750654
H23f: 0.00137179
H25f: 0.00108051
H27f: 0.00116212
H29f: -0.00391113
H31f: -0.00128893

c1sd = 2.1569
c1ed = -0.0023
c2sd = 0.4415
c2ed = 0.2203
c3sd = -0.1348
c3ed = -0.1963
c4sd = -0.2289
c4ed = -0.0168
varx = 0.9321%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.54
 Actual Amplitude: 0.54
 Actual Power: 0.2916
 Distortion 2H-14H: 2.76463e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.298	end: 14.6427	delta: 2.3447
P2 start: 30.8505	end: 37.3389	delta: 6.4884
P3 start: 51.0785	end: 61.074	delta: 9.9955
P4 start: 72.5735	end: 84.6683	delta: 12.0948

H3: 1.40539e-07	H15: 0.647324	H15f: 0.043155
H5: -1.68647e-07	H17: -0.701118	H17f: -0.0412422
H7: -4.0154e-08	H19: -0.179673	H19f: -0.00945649
H9: -7.80772e-08	H21: 0.0167956	H21f: 0.00079979
H11: -1.27763e-07	H23: 0.0336217	H23f: 0.00146181
H13: -6.48641e-08	H25: 0.0285906	H25f: 0.00114362
	H27: 0.0331147	H27f: 0.00122647
	H29: -0.114571	H29f: -0.00395073
	H31: -0.0195841	H31f: -0.000631747

c1sd = 2.2422
 c1ed = -0.0078
 c2sd = 0.5011
 c2ed = 0.1883
 c3sd = -0.0822
 c3ed = -0.2653
 c4sd = -0.1732
 c4ed = -0.0849
 varx = 0.958%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.55
Actual Amplitude:	0.55
Actual Power:	0.3025
Distortion 2H-14H:	2.27166e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.2169	end:	14.5963	delta:	2.3794
P2 start:	30.7461	end:	37.3471	delta:	6.601
P3 start:	50.9469	end:	61.1292	delta:	10.1823
P4 start:	72.4369	end:	84.7739	delta:	12.337

H3: -4.59945e-08	H15: 0.643601	H15f: 0.0429067
H5: -8.27902e-08	H17: -0.683349	H17f: -0.040197
H7: 1.97119e-08	H19: -0.187113	H19f: -0.00984807
H9: -1.53315e-07	H21: 0.0133229	H21f: 0.000634426
H11: 5.01759e-08	H23: 0.0321142	H23f: 0.00139627
H13: -1.2737e-07	H25: 0.0274783	H25f: 0.00109913
	H27: 0.0331165	H27f: 0.00122654
	H29: -0.120039	H29f: -0.00413927
	H31: -0.00795332	H31f: -0.000256559

c1sd = 2.1848
c1ed = -0.1219
c2sd = 0.4643
c2ed = 0.1289
c3sd = -0.1126
c3ed = -0.3113
c4sd = -0.1905
c4ed = -0.0987
varx = 0.9948%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 56/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.56
Actual Amplitude: 0.56
Actual Power: 0.3136
Distortion 2H-14H: 2.10881e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.3699 end: 14.8035 delta: 2.4336
P2 start: 30.7554 end: 37.4624 delta: 6.7071
P3 start: 50.8742 end: 61.2298 delta: 10.3557
P4 start: 72.3242 end: 84.887 delta: 12.5628

H3: 4.51732e-08
H5: 2.71039e-08
H7: -5.80798e-08
H9: -1.50577e-07
H11: 0.0
H13: -1.25095e-07

H15: 0.625484
H17: -0.679146
H19: -0.189591
H21: 0.0178836
H23: 0.0371389
H25: 0.0312303
H27: 0.0362944
H29: -0.117492
H31: 0.0175349

H15f: 0.0416989
H17f: -0.0399498
H19f: -0.00997845
H21f: 0.000851602
H23f: 0.00161473
H25f: 0.00124921
H27f: 0.00134424
H29f: -0.00405145
H31f: 0.000565642

c1sd = 2.3603
c1ed = 0.0212
c2sd = 0.5377
c2ed = 0.1802
c3sd = -0.0894
c3ed = -0.3066
c4sd = -0.19
c4ed = -0.0987
varx = 1.0118%.0

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STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 57/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.57
Actual Amplitude: 0.57
Actual Power: 0.3249
Distortion 2H-14H: 2.54594e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.3336 end: 14.8051 delta: 2.4715
P2 start: 30.6719 end: 37.4891 delta: 6.8173
P3 start: 50.7522 end: 61.2917 delta: 10.5395
P4 start: 72.1903 end: 84.9941 delta: 12.8038

H3: -1.77523e-07 H15: 0.61889
H5: -5.32568e-08 H17: -0.663702
H7: -7.60812e-08 H19: -0.196159
H9: 1.33142e-07 H21: 0.0157308
H11: 7.2623e-08 H23: 0.0368479
H13: -4.09668e-08 H25: 0.0310397
 H27: 0.0369826
 H29: -0.121297
 H31: 0.0310076

H15f: 0.0412594
H17f: -0.0390413
H19f: -0.0103242
H21f: 0.000749086
H23f: 0.00160208
H25f: 0.00124159
H27f: 0.00136973
H29f: -0.00418264
H31f: 0.00100024

c1sd = 2.3264
c1ed = 0.0161
c2sd = 0.4609
c2ed = 0.2
c3sd = -0.2012
c3ed = -0.2549
c4sd = -0.3119
c4ed = -0.0037
varx = 1.0451%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.58
Actual Amplitude:	0.58
Actual Power:	0.3364
Distortion 2H-14H:	1.77369e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.3537	end:	14.8681	delta:	2.5145
P2 start:	30.6162	end:	37.5416	delta:	6.9254
P3 start:	50.6443	end:	61.3639	delta:	10.7197
P4 start:	72.0617	end:	85.1031	delta:	13.0414

H3: -4.36155e-08	H15: 0.608755	H15f: 0.0405836
H5: 7.85079e-08	H17: -0.651428	H17f: -0.0383193
H7: -9.34618e-08	H19: -0.201455	H19f: -0.0106029
H9: 8.7231e-08	H21: 0.0155526	H21f: 0.0007406
H11: 2.37903e-08	H23: 0.038194	H23f: 0.00166061
H13: -8.0521e-08	H25: 0.0320426	H25f: 0.0012817
	H27: 0.03845	H27f: 0.00142407
	H29: -0.123082	H29f: -0.00424419
	H31: 0.0472345	H31f: 0.00152369

c1sd = 2.3697
c1ed = 0.0128
c2sd = 0.4716
c2ed = 0.1862
c3sd = -0.2099
c3ed = -0.2819
c4sd = -0.3235
c4ed = -0.0117
varx = 1.07349.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 59/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.59
Actual Amplitude: 0.59
Actual Power: 0.3481
Distortion 2H-14H: 3.12392e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.3898 end: 14.9488 delta: 2.559
P2 start: 30.5687 end: 37.601 delta: 7.0323
P3 start: 50.5401 end: 61.4385 delta: 10.8984
P4 start: 71.9339 end: 85.2125 delta: 13.2786

H3: -8.57525e-08 H15: 0.597567
H5: -1.02903e-07 H17: -0.639972
H7: 9.18777e-08 H19: -0.206371
H9: -4.28763e-08 H21: 0.0159304
H11: 2.10484e-07 H23: 0.040046
H13: 1.58312e-07 H25: 0.0334002
 H27: 0.0401554
 H29: -0.124199
 H31: 0.0637093

H15f: 0.0398378
H17f: -0.0376454
H19f: -0.0108616
H21f: 0.00075859
H23f: 0.00174113
H25f: 0.00133601
H27f: 0.00148724
H29f: -0.00428271
H31f: 0.00205514

c1sd = 2.4294
c1ed = 0.0262
c2sd = 0.4913
c2ed = 0.1784
c3sd = -0.2135
c3ed = -0.3079
c4sd = -0.3327
c4ed = -0.0209
varx = 1.1001%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 60/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.6
Actual Amplitude: 0.6
Actual Power: 0.36
Distortion 2H-14H: 1.46545e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.464 end: 15.0717 delta: 2.6077
P2 start: 30.5413 end: 37.6788 delta: 7.1375
P3 start: 50.446 end: 61.5202 delta: 11.0742
P4 start: 71.8098 end: 85.3233 delta: 13.5135

H3: 0.0 H15: 0.583977
H5: -5.0594e-08 H17: -0.630653
H7: -1.80693e-08 H19: -0.210355
H9: -1.40539e-08 H21: 0.0177923
H11: -6.89918e-08 H23: 0.0431203
H13: 1.16755e-07 H25: 0.0356026
 H27: 0.0423586
 H29: -0.123845
 H31: 0.0814392

H15f: 0.0389318
H17f: -0.0370972
H19f: -0.0110713
H21f: 0.000847252
H23f: 0.00187479
H25f: 0.0014241
H27f: 0.00156884
H29f: -0.00427051
H31f: 0.00262707

c1sd = 2.5202
c1ed = 0.1019
c2sd = 0.511
c2ed = 0.2091
c3sd = -0.237
c3ed = -0.2968
c4sd = -0.3736
c4ed = 0.0066
varx = 1.1232%.

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and development assistance available via done@tinaja.com or www.tinaja.com/magn01.html

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.61
 Actual Amplitude: 0.61
 Actual Power: 0.3721
 Distortion 2H-14H: 3.44819e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.4729	end: 15.1226	delta: 2.6496
P2 start: 30.4801	end: 37.7238	delta: 7.2437
P3 start: 50.3333	end: 61.5869	delta: 11.2536
P4 start: 71.6768	end: 85.4319	delta: 13.7551

H3: 4.14705e-08	H15: 0.574321	H15f: 0.0382881
H5: 2.48823e-08	H17: -0.617351	H17f: -0.0363148
H7: -2.66596e-07	H19: -0.215832	H19f: -0.0113596
H9: 8.2941e-08	H21: 0.0170455	H21f: 0.000811693
H11: 1.80962e-07	H23: 0.0442213	H23f: 0.00192267
H13: 7.65609e-08	H25: 0.0363943	H25f: 0.00145577
	H27: 0.0437767	H27f: 0.00162136
	H29: -0.125697	H29f: -0.00433437
	H31: 0.0950789	H31f: 0.00306706

c1sd = 2.5761
c1ed = 0.0192
c2sd = 0.5835
c2ed = 0.1203
c3sd = -0.1496
c3ed = -0.4301
c4sd = -0.2705
c4ed = -0.1208
varx = 1.152%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.62
 Actual Amplitude: 0.62
 Actual Power: 0.3844
 Distortion 2H-14H: 2.94113e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.4019	end: 15.0845	delta: 2.6826
P2 start: 30.3765	end: 37.7276	delta: 7.3511
P3 start: 50.197	end: 61.635	delta: 11.438
P4 start: 71.5328	end: 85.5382	delta: 14.0055

H3: -2.04008e-07	H15: 0.569438	H15f: 0.0379625
H5: 0.0	H17: -0.599161	H17f: -0.0352448
H7: -5.24592e-08	H19: -0.223103	H19f: -0.0117423
H9: 1.90408e-07	H21: 0.0129712	H21f: 0.000617675
H11: 6.67663e-08	H23: 0.0427964	H23f: 0.00186071
H13: -3.7663e-08	H25: 0.0354157	H25f: 0.00141663
	H27: 0.0442689	H27f: 0.00163959
	H29: -0.130356	H29f: -0.00449504
	H31: 0.104238	H31f: 0.00336251

c1sd = 2.5041
 c1ed = -0.0164
 c2sd = 0.4774
 c2ed = 0.1267
 c3sd = -0.2897
 c3ed = -0.3782
 c4sd = -0.419
 c4ed = -0.01
 varx = 1.188%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 63/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.63
Actual Amplitude: 0.63
Actual Power: 0.3969
Distortion 2H-14H: 1.59762e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.5656 end: 15.3079 delta: 2.7423
P2 start: 30.3978 end: 37.8494 delta: 7.4516
P3 start: 50.1275 end: 61.7333 delta: 11.6058
P4 start: 71.4169 end: 85.6519 delta: 14.2349

H3: 0.0 H15: 0.55024
H5: -4.81848e-08 H17: -0.594857
H7: -1.72088e-08 H19: -0.224847
H9: 5.35386e-08 H21: 0.0184945
H11: -8.76087e-08 H23: 0.0489054
H13: 1.11196e-07 H25: 0.0396489
 H27: 0.0475844
 H29: -0.126369
 H31: 0.123826

H15f: 0.0366826
H17f: -0.0349916
H19f: -0.011834
H21f: 0.00088069
H23f: 0.00212632
H25f: 0.00158596
H27f: 0.00176239
H29f: -0.00435756
H31f: 0.00399438

c1sd = 2.6944
c1ed = 0.1312
c2sd = 0.5745
c2ed = 0.1728
c3sd = -0.2459
c3ed = -0.3933
c4sd = -0.4012
c4ed = -0.0301
varx = 1.2022%

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STEP-LOCKED MAGIC SINEWAVE ANXC16 - 64/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.64
Actual Amplitude: 0.64
Actual Power: 0.4096
Distortion 2H-14H: 1.61295e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.5023 end: 15.2777 delta: 2.7754
P2 start: 30.297 end: 37.8542 delta: 7.5572
P3 start: 49.991 end: 61.7798 delta: 11.7888
P4 start: 71.2708 end: 85.7585 delta: 14.4877

H3: 7.90531e-08	H15: 0.544789	H15f: 0.0363193
H5: -1.1858e-07	H17: -0.576898	H17f: -0.0339352
H7: 3.38799e-08	H19: -0.231974	H19f: -0.0122092
H9: -3.95266e-08	H21: 0.0144179	H21f: 0.000686565
H11: 0.0	H23: 0.047677	H23f: 0.00207291
H13: 5.47291e-08	H25: 0.0388349	H25f: 0.0015534
	H27: 0.048294	H27f: 0.00178867
	H29: -0.130521	H29f: -0.00450072
	H31: 0.132242	H31f: 0.00426587

c1sd = 2.6525
c1ed = 0.0402
c2sd = 0.5345
c2ed = 0.1167
c3sd = -0.2913
c3ed = -0.4379
c4sd = -0.4398
c4ed = -0.0309
varx = 1.2373%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 65/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.65
Actual Amplitude: 0.65
Actual Power: 0.4225
Distortion 2H-14H: 2.06159e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.5973 end: 15.4254 delta: 2.8281
P2 start: 30.283 end: 37.9407 delta: 7.6577
P3 start: 49.9011 end: 61.8607 delta: 11.9597
P4 start: 71.1442 end: 85.8701 delta: 14.7258

H3: -1.55674e-07 H15: 0.529656
H5: 1.16755e-07 H17: -0.56832
H7: 3.33587e-08 H19: -0.235181
H9: -1.29728e-08 H21: 0.0171305
H11: 2.12283e-08 H23: 0.0517284
H13: 5.38871e-08 H25: 0.0415738
 H27: 0.0508052
 H29: -0.12876
 H31: 0.146838

H15f: 0.0353104
H17f: -0.0334306
H19f: -0.012378
H21f: 0.000815737
H23f: 0.00224906
H25f: 0.00166295
H27f: 0.00188168
H29f: -0.00444
H31f: 0.00473671

c1sd = 2.7638
c1ed = 0.1415
c2sd = 0.5669
c2ed = 0.1568
c3sd = -0.3118
c3ed = -0.4264
c4sd = -0.4845
c4ed = -0.0012
varx = 1.2572%

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.66
 Actual Amplitude: 0.66
 Actual Power: 0.4356
 Distortion 2H-14H: 3.34589e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.8012	end: 15.6983	delta: 2.8971
P2 start: 30.3339	end: 38.0886	delta: 7.7547
P3 start: 49.8467	end: 61.9675	delta: 12.1209
P4 start: 71.0326	end: 85.9852	delta: 14.9526

H3: 0.0	H15: 0.507661	H15f: 0.0338441
H5: -1.83978e-07	H17: -0.566224	H17f: -0.0333073
H7: 1.14986e-07	H19: -0.23506	H19f: -0.0123716
H9: -6.38813e-08	H21: 0.0252613	H21f: 0.00120292
H11: 1.2544e-07	H23: 0.059764	H23f: 0.00259844
H13: -2.12282e-07	H25: 0.0467459	H25f: 0.00186984
	H27: 0.0542642	H27f: 0.00200979
	H29: -0.122957	H29f: -0.00423991
	H31: 0.164357	H31f: 0.00530184

c1sd = 3.0079
c1ed = 0.3
c2sd = 0.7322
c2ed = 0.1903
c3sd = -0.195
c3ed = -0.4908
c4sd = -0.3941
c4ed = -0.0881
varx = 1.2648%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.67
 Actual Amplitude: 0.67
 Actual Power: 0.4489
 Distortion 2H-14H: 2.91263e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.5614	end: 15.4658	delta: 2.9044
P2 start: 30.1293	end: 37.9912	delta: 7.8618
P3 start: 49.6499	end: 61.966	delta: 12.3161
P4 start: 70.856	end: 86.0865	delta: 15.2305

H3: -1.1327e-07	H15: 0.512905	H15f: 0.0341937
H5: 6.79621e-08	H17: -0.537302	H17f: -0.031606
H7: -1.94177e-07	H19: -0.246951	H19f: -0.0129974
H9: 1.63612e-07	H21: 0.0123298	H21f: 0.000587135
H11: -4.11891e-08	H23: 0.0522671	H23f: 0.00227248
H13: 3.48524e-08	H25: 0.0419539	H25f: 0.00167815
	H27: 0.0534816	H27f: 0.0019808
	H29: -0.133161	H29f: -0.00459176
	H31: 0.164365	H31f: 0.00530208

c1sd = 2.7746
c1ed = 0.0489
c2sd = 0.5463
c2ed = 0.0742
c3sd = -0.3638
c3ed = -0.5203
c4sd = -0.5378
c4ed = -0.0197
varx = 1.3175%.

STEP-LOCKED MAGIC SINEWAVE ANXC16 - 68/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.68
Actual Amplitude: 0.68
Actual Power: 0.4624
Distortion 2H-14H: 1.27188e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.7577 end: 15.7308 delta: 2.9731
P2 start: 30.1763 end: 38.1333 delta: 7.957
P3 start: 49.5918 end: 62.0677 delta: 12.4759
P4 start: 70.7406 end: 86.2014 delta: 15.4608

H3: -3.72015e-08	H15: 0.491484	H15f: 0.0327656
H5: -4.46418e-08	H17: -0.534638	H17f: -0.0314493
H7: 3.1887e-08	H19: -0.24724	H19f: -0.0130126
H9: 9.92039e-08	H21: 0.019927	H21f: 0.000948905
H11: 4.05834e-08	H23: 0.0601557	H23f: 0.00261546
H13: 1.71699e-08	H25: 0.0470265	H25f: 0.00188106
	H27: 0.0569234	H27f: 0.00210827
	H29: -0.127266	H29f: -0.00438849
	H31: 0.179848	H31f: 0.00580155

c1sd = 2.9941
c1ed = 0.2481
c2sd = 0.659
c2ed = 0.1505
c3sd = -0.3234
c3ed = -0.517
c4sd = -0.5371
c4ed = -0.021
varx = 1.3262%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.69
Actual Amplitude:	0.69
Actual Power:	0.4761
Distortion 2H-14H:	1.32968e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	12.84	end: 15.8668	delta: 3.0269
P2 start:	30.1594	end: 38.2136	delta: 8.0542
P3 start:	49.4978	end: 62.1413	delta: 12.6435
P4 start:	70.6077	end: 86.3129	delta: 15.7051

H3: 3.66623e-08	H15: 0.476884
H5: -4.39948e-08	H17: -0.525019
H7: 1.57124e-08	H19: -0.250212
H9: -2.44415e-08	H21: 0.022342
H11: 7.99905e-08	H23: 0.0641621
H13: 8.46053e-08	H25: 0.0494888
	H27: 0.0591671
	H29: -0.125471
	H31: 0.189943

H15f: 0.0317923
H17f: -0.0308834
H19f: -0.013169
H21f: 0.00106391
H23f: 0.00278966
H25f: 0.00197955
H27f: 0.00219137
H29f: -0.00432657
H31f: 0.0061272

c1sd = 3.0947
c1ed = 0.3316
c2sd = 0.6946
c2ed = 0.1784
c3sd = -0.3389
c3ed = -0.522
c4sd = -0.5773
c4ed = -0.0021
varx = 1.3452%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 70/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.7
Actual Amplitude: 0.7
Actual Power: 0.49
Distortion 2H-14H: 2.85236e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.7069 end: 15.7536 delta: 3.0467
P2 start: 30.0125 end: 38.1678 delta: 8.1554
P3 start: 49.3294 end: 62.1579 delta: 12.8284
P4 start: 70.4394 end: 86.4178 delta: 15.9785

H3: 1.44554e-07 H15: 0.475398
H5: -6.50494e-08 H17: -0.502203
H7: 1.08416e-07 H19: -0.259169
H9: -1.92739e-07 H21: 0.0137069
H11: -7.88478e-08 H23: 0.0602249
H13: -3.33587e-08 H25: 0.0470779
 H27: 0.0597354
 H29: -0.13135
 H31: 0.192444

H15f: 0.0316932
H17f: -0.0295413
H19f: -0.0136405
H21f: 0.000652708
H23f: 0.00261847
H25f: 0.00188312
H27f: 0.00221242
H29f: -0.0045293
H31f: 0.00620788

c1sd = 2.9859
c1ed = 0.1494
c2sd = 0.6167
c2ed = 0.0636
c3sd = -0.404
c3ed = -0.6087
c4sd = -0.6238
c4ed = -0.019
varx = 1.3864%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.71
 Actual Amplitude: 0.71
 Actual Power: 0.504099
 Distortion 2H-14H: 2.01256e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.7967	end: 15.8983	delta: 3.1016
P2 start: 29.9998	end: 38.2499	delta: 8.2501
P3 start: 49.2358	end: 62.229	delta: 12.9933
P4 start: 70.3038	end: 86.5297	delta: 16.2259

H3: 0.0	H15: 0.460319	H15f: 0.0306879
H5: -6.41333e-08	H17: -0.492908	H17f: -0.0289946
H7: 1.37428e-07	H19: -0.261918	H19f: -0.0137852
H9: -9.50123e-08	H21: 0.016253	H21f: 0.000773952
H11: 7.77373e-08	H23: 0.0645572	H23f: 0.00280684
H13: -4.93333e-08	H25: 0.0497339	H25f: 0.00198936
	H27: 0.0621273	H27f: 0.00230101
	H29: -0.128956	H29f: -0.00444677
	H31: 0.201232	H31f: 0.00649135

c1sd = 3.0963
c1ed = 0.2353
c2sd = 0.6629
c2ed = 0.0868
c3sd = -0.4096
c3ed = -0.6256
c4sd = -0.6556
c4ed = -0.011
varx = 1.4043%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.72
Actual Amplitude: 0.72
Actual Power: 0.5184
Distortion 2H-14H: 1.81572e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.8719 end: 16.027 delta: 3.1551
P2 start: 29.9797 end: 38.3238 delta: 8.3441
P3 start: 49.1372 end: 62.295 delta: 13.1578
P4 start: 70.1644 end: 86.6412 delta: 16.4768

H3: -7.02694e-08	H15: 0.446063
H5: -2.10808e-08	H17: -0.48268
H7: -3.01155e-08	H19: -0.264878
H9: 1.40539e-07	H21: 0.0181446
H11: -7.66576e-08	H23: 0.0684546
H13: -3.24321e-08	H25: 0.0520412
	H27: 0.0643377
	H29: -0.126976
	H31: 0.208506

H15f: 0.0297376
H17f: -0.028393
H19f: -0.013941
H21f: 0.000864028
H23f: 0.00297629
H25f: 0.00208165
H27f: 0.00238288
H29f: -0.00437849
H31f: 0.00672599

c1sd = 3.1899
c1ed = 0.3115
c2sd = 0.6952
c2ed = 0.1083
c3sd = -0.4298
c3ed = -0.6381
c4sd = -0.7025
c4ed = 0.008
varx = 1.42299.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.73
 Actual Amplitude: 0.73
 Actual Power: 0.5329
 Distortion 2H-14H: 2.08516e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 12.9498	end: 16.1598	delta: 3.21
P2 start: 29.9627	end: 38.3996	delta: 8.4369
P3 start: 49.0395	end: 62.36	delta: 13.3204
P4 start: 70.0237	end: 86.7528	delta: 16.7291

H3: 3.46534e-08	H15: 0.431591	H15f: 0.0287727
H5: -4.15841e-08	H17: -0.472584	H17f: -0.0277991
H7: 8.91088e-08	H19: -0.26758	H19f: -0.0140831
H9: -2.31023e-08	H21: 0.0202617	H21f: 0.000964842
H11: 1.51215e-07	H23: 0.0725611	H23f: 0.00315483
H13: 9.59633e-08	H25: 0.0543885	H25f: 0.00217554
	H27: 0.0664919	H27f: 0.00246266
	H29: -0.124782	H29f: -0.00430284
	H31: 0.214797	H31f: 0.00692892

c1sd = 3.2901
c1ed = 0.3811
c2sd = 0.7414
c2ed = 0.1209
c3sd = -0.4328
c3ed = -0.6677
c4sd = -0.7315
c4ed = 0.008
varx = 1.4406%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 74/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.74
Actual Amplitude: 0.74
Actual Power: 0.5476
Distortion 2H-14H: 2.02547e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.8898 end: 16.1295 delta: 3.2397
P2 start: 29.8569 end: 38.3882 delta: 8.5313
P3 start: 48.8894 end: 62.3842 delta: 13.4947
P4 start: 69.8564 end: 86.8605 delta: 17.0041

H3: 0.0	H15: 0.425468	H15f: 0.0283645
H5: 4.10222e-08	H17: -0.4539	H17f: -0.0267
H7: -4.39523e-08	H19: -0.27428	H19f: -0.0144358
H9: 0.0	H21: 0.014576	H21f: 0.000694096
H11: -1.11879e-07	H23: 0.0712653	H23f: 0.00309849
H13: 1.57778e-07	H25: 0.0536317	H25f: 0.00214527
	H27: 0.0679461	H27f: 0.00251652
	H29: -0.127309	H29f: -0.00438996
	H31: 0.216861	H31f: 0.00699551

c1sd = 3.2353
c1ed = 0.3358
c2sd = 0.6506
c2ed = 0.0945
c3sd = -0.5604
c3ed = -0.666
c4sd = -0.8723
c4ed = 0.0892
varx = 1.4728%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 75/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.75
Actual Amplitude: 0.75
Actual Power: 0.5625
Distortion 2H-14H: 9.24251e-06%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 12.9527 end: 16.2449 delta: 3.2922
P2 start: 29.8306 end: 38.4524 delta: 8.6218
P3 start: 48.7842 end: 62.4398 delta: 13.6556
P4 start: 69.7082 end: 86.9719 delta: 17.2637

H3: 3.37293e-08 H15: 0.411866
H5: 4.04752e-08 H17: -0.442774
H7: -1.44554e-08 H19: -0.277265
H9: -4.49724e-08 H21: 0.0156749
H11: -3.67956e-08 H23: 0.0748695
H13: -4.67022e-08 H25: 0.0556361
 H27: 0.0700438
 H29: -0.125321
 H31: 0.221054

H15f: 0.0274577
H17f: -0.0260455
H19f: -0.0145929
H21f: 0.000746423
H23f: 0.0032552
H25f: 0.00222545
H27f: 0.00259421
H29f: -0.0043214
H31f: 0.00713078

c1sd = 3.336
c1ed = 0.3436
c2sd = 0.7319
c2ed = 0.0511
c3sd = -0.5047
c3ed = -0.7713
c4sd = -0.8306
c4ed = 0.0107
varx = 1.4913%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.76
 Actual Amplitude: 0.76
 Actual Power: 0.5776
 Distortion 2H-14H: 1.15788e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.0605	end: 16.4152	delta: 3.3547
P2 start: 29.8359	end: 38.5462	delta: 8.7103
P3 start: 48.6965	end: 62.5064	delta: 13.8098
P4 start: 69.5663	end: 87.0847	delta: 17.5185

H3: -3.32855e-08	H15: 0.395496	H15f: 0.0263664
H5: 0.0	H17: -0.434436	H17f: -0.0255551
H7: -1.42652e-08	H19: -0.278681	H19f: -0.0146674
H9: -9.98566e-08	H21: 0.0194911	H21f: 0.000928147
H11: 0.0	H23: 0.080413	H23f: 0.00349622
H13: -4.60876e-08	H25: 0.0586047	H25f: 0.00234419
	H27: 0.0721997	H27f: 0.00267406
	H29: -0.121666	H29f: -0.00419536
	H31: 0.225124	H31f: 0.00726207

c1sd = 3.4706
c1ed = 0.4376
c2sd = 0.8134
c2ed = 0.0686
c3sd = -0.4782
c3ed = -0.8189
c4sd = -0.8379
c4ed = -0.0111
varx = 1.504%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.77
 Actual Amplitude: 0.77
 Actual Power: 0.5929
 Distortion 2H-14H: 1.95663e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.0772	end: 16.4764	delta: 3.3992
P2 start: 29.7803	end: 38.5793	delta: 8.799
P3 start: 48.5719	end: 62.5431	delta: 13.9712
P4 start: 69.4041	end: 87.195	delta: 17.7909

H3: -3.28532e-08	H15: 0.384628	H15f: 0.0256419
H5: -1.97119e-08	H17: -0.420366	H17f: -0.0247274
H7: 4.22399e-08	H19: -0.282794	H19f: -0.0148839
H9: -2.19022e-08	H21: 0.017833	H21f: 0.00084919
H11: 1.0752e-07	H23: 0.0822893	H23f: 0.0035778
H13: -1.5163e-07	H25: 0.0595462	H25f: 0.00238185
	H27: 0.0740541	H27f: 0.00274274
	H29: -0.120975	H29f: -0.00417156
	H31: 0.226429	H31f: 0.00730415

c1sd = 3.505
c1ed = 0.4483
c2sd = 0.8083
c2ed = 0.0513
c3sd = -0.5273
c3ed = -0.8577
c4sd = -0.9109
c4ed = 0.0101
varx = 1.5263%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 78/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.78
Actual Amplitude: 0.78
Actual Power: 0.6084
Distortion 2H-14H: 1.18735e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.161 end: 16.6196 delta: 3.4586
P2 start: 29.7722 end: 38.6574 delta: 8.8852
P3 start: 48.4742 end: 62.5973 delta: 14.1231
P4 start: 69.2525 end: 87.3074 delta: 18.055

H3: 6.48641e-08	H15: 0.369647	H15f: 0.0246431
H5: -1.94592e-08	H17: -0.410492	H17f: -0.0241466
H7: -4.16984e-08	H19: -0.284593	H19f: -0.0149786
H9: 4.32427e-08	H21: 0.0203011	H21f: 0.00096672
H11: -7.07608e-08	H23: 0.0870467	H23f: 0.00378464
H13: -2.99373e-08	H25: 0.0619103	H25f: 0.00247641
	H27: 0.0759545	H27f: 0.00281313
	H29: -0.117896	H29f: -0.00406538
	H31: 0.227957	H31f: 0.00735344

c1sd = 3.609
c1ed = 0.5341
c2sd = 0.8577
c2ed = 0.0719
c3sd = -0.5389
c3ed = -0.8896
c4sd = -0.961
c4ed = 0.0209
varx = 1.5403%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.79
Actual Amplitude:	0.79
Actual Power:	0.6241
Distortion 2H-14H:	1.58364e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	13.2033	end:	16.7129	delta:	3.5096
P2 start:	29.7356	end:	38.7062	delta:	8.9706
P3 start:	48.3584	end:	62.6352	delta:	14.2768
P4 start:	69.089	end:	87.4187	delta:	18.3297

H3: -9.60645e-08	H15: 0.357167	H15f: 0.0238112
H5: -5.76387e-08	H17: -0.397976	H17f: -0.0234104
H7: 9.60645e-08	H19: -0.287602	H19f: -0.0151369
H9: -1.06738e-08	H21: 0.0201162	H21f: 0.000957913
H11: 3.49326e-08	H23: 0.0901312	H23f: 0.00391875
H13: -4.43375e-08	H25: 0.0633585	H25f: 0.00253434
	H27: 0.0777653	H27f: 0.00288019
	H29: -0.116029	H29f: -0.00400099
	H31: 0.227849	H31f: 0.00734996

c1sd = 3.6577
c1ed = 0.609
c2sd = 0.8395
c2ed = 0.1024
c3sd = -0.6273
c3ed = -0.8791
c4sd = -1.0922
c4ed = 0.0999
varx = 1.5585%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 80/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.8
Actual Amplitude: 0.8
Actual Power: 0.64
Distortion 2H-14H: 1.67735e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.2643 end: 16.8299 delta: 3.5656
P2 start: 29.7137 end: 38.7678 delta: 9.0541
P3 start: 48.25 end: 62.6755 delta: 14.4255
P4 start: 68.9261 end: 87.5307 delta: 18.6047

H3: -3.16212e-08
H5: -9.48637e-08
H7: -2.71039e-08
H9: 1.26485e-07
H11: -3.44959e-08
H13: 1.45944e-08

H15: 0.343514
H17: -0.386636
H19: -0.289807
H21: 0.0211275
H23: 0.0941036
H25: 0.0651611
H27: 0.0794862
H29: -0.113408
H31: 0.227045

H15f: 0.022901
H17f: -0.0227433
H19f: -0.015253
H21f: 0.00100607
H23f: 0.00409146
H25f: 0.00260644
H27f: 0.00294393
H29f: -0.00391062
H31f: 0.00732404

c1sd = 3.7426
c1ed = 0.6581
c2sd = 0.8855
c2ed = 0.096
c3sd = -0.634
c3ed = -0.9405
c4sd = -1.1351
c4ed = 0.0919
varx = 1.5737%

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and development assistance available via done@tinaja.com or www.tinaja.com/magn01.html

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.81
 Actual Amplitude: 0.81
 Actual Power: 0.6561
 Distortion 2H-14H: 2.16854e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.3208	end: 16.9422	delta: 3.6213
P2 start: 29.6895	end: 38.8256	delta: 9.1362
P3 start: 48.1388	end: 62.7103	delta: 14.5715
P4 start: 68.7583	end: 87.6427	delta: 18.8845

H3: 6.24617e-08	H15: 0.33011	H15f: 0.0220073
H5: -5.62156e-08	H17: -0.374995	H17f: -0.0220585
H7: 0.0	H19: -0.291996	H19f: -0.0153682
H9: 1.87385e-07	H21: 0.0218106	H21f: 0.0010386
H11: -6.81401e-08	H23: 0.0979697	H23f: 0.00425955
H13: -1.44142e-08	H25: 0.0668294	H25f: 0.00267318
	H27: 0.0811241	H27f: 0.0030046
	H29: -0.110775	H29f: -0.00381981
	H31: 0.225215	H31f: 0.00726502

c1sd = 3.8355
 c1ed = 0.6667
 c2sd = 0.9649
 c2ed = 0.0502
 c3sd = -0.59
 c3ed = -1.0608
 c4sd = -1.12
 c4ed = 0.021
 varx = 1.5888%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.82
 Actual Amplitude: 0.82
 Actual Power: 0.6724
 Distortion 2H-14H: 2.19678e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.2903	end: 16.9451	delta: 3.6548
P2 start: 29.5988	end: 38.8153	delta: 9.2166
P3 start: 47.9846	end: 62.7092	delta: 14.7245
P4 start: 68.5646	end: 87.7524	delta: 19.1879

H3: 0.0
 H5: -3.702e-08
 H7: -2.64429e-08
 H9: 1.02833e-07
 H11: -1.68273e-07
 H13: 8.54308e-08

H15: 0.32198
H17: -0.357702
 H19: -0.297142
 H21: 0.0162369
 H23: 0.0980204
 H25: 0.0667729
 H27: 0.0831019
 H29: -0.110484
 H31: 0.221601

H15f: 0.0214653
H17f: -0.0210413
 H19f: -0.015639
 H21f: 0.000773185
 H23f: 0.00426176
 H25f: 0.00267092
 H27f: 0.00307785
 H29f: -0.00380978
 H31f: 0.00714841

c1sd = 3.8129
 c1ed = 0.6471
 c2sd = 0.8968
 c2ed = 0.0173
 c3sd = -0.7105
 c3ed = -1.0957
 c4sd = -1.2739
 c4ed = 0.0909
 varx = 1.6138%.

STEP-LOCKED MAGIC SINEWAVE ANXC16 - 83/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.83
Actual Amplitude: 0.83
Actual Power: 0.6889
Distortion 2H-14H: 1.43212e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.397 end: 17.1219 delta: 3.7249
P2 start: 29.6148 end: 38.9097 delta: 9.2949
P3 start: 47.8953 end: 62.7521 delta: 14.8567
P4 start: 68.3996 end: 87.8662 delta: 19.4666

H3: 0.0 H15: 0.305489
H5: 1.8287e-08 H17: -0.34927
H7: 7.83728e-08 H19: -0.297233
H9: 0.0 H21: 0.0203152
H11: -8.31227e-08 H23: 0.104306
H13: 8.44015e-08 H25: 0.0693561
H27: 0.0843506
H29: -0.106027
H31: 0.218403

H15f: 0.020366
H17f: -0.0205453
H19f: -0.0156438
H21f: 0.00096739
H23f: 0.00453504
H25f: 0.00277424
H27f: 0.0031241
H29f: -0.00365611
H31f: 0.00704525

c1sd = 3.9623
c1ed = 0.7023
c2sd = 1.0344
c2ed = -0.0099
c3sd = -0.6178
c3ed = -1.2347
c4sd = -1.2242
c4ed = -0.01
varx = 1.6215%.

STEP-LOCKED MAGIC SINEWAVE ANXC16 - 84/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.84
Actual Amplitude: 0.84
Actual Power: 0.7056
Distortion 2H-14H: 2.28244e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.5006 end: 17.2969 delta: 3.7964
P2 start: 29.632 end: 39.0039 delta: 9.3719
P3 start: 47.8058 end: 62.7901 delta: 14.9843
P4 start: 68.2301 end: 87.9801 delta: 19.75

H3: 3.01155e-08 H15: 0.289115
H5: -7.22771e-08 H17: -0.340676
H7: 1.29066e-07 H19: -0.297063
H9: -4.0154e-08 H21: 0.0243971
H11: 6.57065e-08 H23: 0.110599
H13: -1.52894e-07 H25: 0.0717169
H27: 0.085291
H29: -0.101617
H31: 0.21402

H15f: 0.0192743
H17f: -0.0200397
H19f: -0.0156349
H21f: 0.00116177
H23f: 0.00480863
H25f: 0.00286867
H27f: 0.00315893
H29f: -0.00350405
H31f: 0.00690388

c1sd = 4.0824
c1ed = 0.8302
c2sd = 1.0987
c2ed = 0.0372
c3sd = -0.6368
c3ed = -1.2673
c4sd = -1.3105
c4ed = 0.0207
varx = 1.6283%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 85/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.85
Actual Amplitude: 0.85
Actual Power: 0.7225
Distortion 2H-14H: 1.7911e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.4875 end: 17.3221 delta: 3.8346
P2 start: 29.5541 end: 38.9998 delta: 9.4457
P3 start: 47.6532 end: 62.7754 delta: 15.1222
P4 start: 68.022 end: 88.0908 delta: 20.0688

H3: -2.97612e-08
H5: 0.0
H7: 1.27548e-07
H9: -1.19045e-07
H11: 0.0
H13: 2.74719e-08

H15: 0.279874
H17: -0.324401
H19: -0.301254
H21: 0.0194203
H23: 0.111644
H25: 0.0720331
H27: 0.0871562
H29: -0.100012
H31: 0.208015

H15f: 0.0186583
H17f: -0.0190824
H19f: -0.0158555
H21f: 0.000924775
H23f: 0.00485409
H25f: 0.00288132
H27f: 0.00322801
H29f: -0.00344868
H31f: 0.00671016

c1sd = 4.0932
c1ed = 0.7876
c2sd = 1.0886
c2ed = -0.0347
c3sd = -0.688
c3ed = -1.3834
c4sd = -1.3989
c4ed = 0.0118
varx = 1.6494%.

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STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 86/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.86
Actual Amplitude: 0.86
Actual Power: 0.7396
Distortion 2H-14H: 3.32153e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.5816 end: 17.4872 delta: 3.9056
P2 start: 29.5668 end: 39.0856 delta: 9.5188
P3 start: 47.5572 end: 62.7971 delta: 15.2399
P4 start: 67.8378 end: 88.2048 delta: 20.367

H3: -2.94151e-08 H15: 0.264045
H5: -1.76491e-07 H17: -0.315183
H7: 1.00852e-07 H19: -0.301039
H9: -1.17666e-07 H21: 0.022726
H11: -3.20892e-08 H23: 0.117749
H13: -2.30795e-07 H25: 0.0740899
 H27: 0.0878072
 H29: -0.0955266
 H31: 0.201633

H15f: 0.017603
H17f: -0.0185402
H19f: -0.0158441
H21f: 0.00108219
H23f: 0.00511954
H25f: 0.0029636
H27f: 0.00325212
H29f: -0.00329402
H31f: 0.00650428

c1sd = 4.2083
c1ed = 0.8929
c2sd = 1.1611
c2ed = -0.0088
c3sd = -0.6944
c3ed = -1.4512
c4sd = -1.4775
c4ed = 0.0201
varx = 1.65599.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.87
 Actual Amplitude: 0.87
 Actual Power: 0.7569
 Distortion 2H-14H: 5.97156e-06%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.6902 end: 17.6739 delta: 3.9837
 P2 start: 29.5959 end: 39.1867 delta: 9.5907
 P3 start: 47.4708 end: 62.8193 delta: 15.3485
 P4 start: 67.6522 end: 88.3195 delta: 20.6673

H3: 2.9077e-08	H15: 0.247247
H5: -3.48924e-08	H17: -0.306981
H7: -1.24616e-08	H19: -0.299834
H9: -1.93847e-08	H21: 0.0274208
H11: -1.58602e-08	H23: 0.124679
H13: -2.68403e-08	H25: 0.076167
	H27: 0.087883
	H29: -0.0906465
	H31: 0.194215

H15f: 0.0164832
H17f: -0.0180577
H19f: -0.0157807
H21f: 0.00130575
H23f: 0.00542081
H25f: 0.00304668
H27f: 0.00325493
H29f: -0.00312574
H31f: 0.00626501

c1sd = 4.3414
c1ed = 1.01
c2sd = 1.2599
c2ed = 0.0227
c3sd = -0.6766
c3ed = -1.5333
c4sd = -1.5402
c4ed = 0.0118
varx = 1.6593%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 88/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.88
Actual Amplitude: 0.88
Actual Power: 0.7744
Distortion 2H-14H: 2.0945e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.7911 end: 17.8529 delta: 4.0618
P2 start: 29.6223 end: 39.2834 delta: 9.661
P3 start: 47.3813 end: 62.8314 delta: 15.4501
P4 start: 67.4575 end: 88.4341 delta: 20.9766

H3: 2.87466e-08
H5: -3.44959e-08
H7: 1.4784e-07
H9: -8.62398e-08
H11: 6.27198e-08
H13: -9.28736e-08

H15: 0.23086
H17: -0.298295
H19: -0.298545
H21: 0.0316677
H23: 0.131379
H25: 0.0779002
H27: 0.0876287
H29: -0.0858786
H31: 0.185712

H15f: 0.0153907
H17f: -0.0175468
H19f: -0.0157129
H21f: 0.00150799
H23f: 0.00571214
H25f: 0.00311601
H27f: 0.00324551
H29f: -0.00296133
H31f: 0.00599071

c1sd = 4.4656
c1ed = 1.1222
c2sd = 1.353
c2ed = 0.0528
c3sd = -0.6664
c3ed = -1.6209
c4sd = -1.6171
c4ed = 0.0088
varx = 1.6626%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.89
Actual Amplitude:	0.89
Actual Power:	0.7921
Distortion 2H-14H:	1.98217e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	13.8671	end: 18.0004	delta: 4.1333
P2 start:	29.6289	end: 39.3574	delta: 9.7285
P3 start:	47.2764	end: 62.823	delta: 15.5466
P4 start:	67.2459	end: 88.5483	delta: 21.3024

H3: 1.42118e-07	H15: 0.215977
H5: -3.41083e-08	H17: -0.287951
H7: 2.43631e-08	H19: -0.298064
H9: 9.47453e-08	H21: 0.0337886
H11: -4.65113e-08	H23: 0.137069
H13: 7.87115e-08	H25: 0.0791861
	H27: 0.08743
	H29: -0.0814504
	H31: 0.17623

H15f: 0.0143985
H17f: -0.0169383
H19f: -0.0156876
H21f: 0.00160898
H23f: 0.00595951
H25f: 0.00316744
H27f: 0.00323815
H29f: -0.00280863
H31f: 0.00568485

c1sd = 4.5618
c1ed = 1.2124
c2sd = 1.417
c2ed = 0.0694
c3sd = -0.6853
c3ed = -1.7153
c4sd = -1.7274
c4ed = 0.0216
varx = 1.6683%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 90/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.9
Actual Amplitude: 0.9
Actual Power: 0.81
Distortion 2H-14H: 9.77144e-06%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 13.9592 end: 18.1721 delta: 4.2129
P2 start: 29.6543 end: 39.4493 delta: 9.795
P3 start: 47.1827 end: 62.8129 delta: 15.6302
P4 start: 67.0306 end: 88.6632 delta: 21.6326

H3: -8.43233e-08 H15: 0.200015
H5: -1.68647e-08 H17: -0.278721
H7: -2.40924e-08 H19: -0.296442
H9: -3.7477e-08 H21: 0.037452
H11: 0.0 H23: 0.14364
H13: -1.29728e-08 H25: 0.0804185
 H27: 0.0864815
 H29: -0.0765866
 H31: 0.165772

H15f: 0.0133343 H17f: -0.0163953
H19f: -0.0156022 H21f: 0.00178343
H23f: 0.00624521 H25f: 0.00321674
H27f: 0.00320302 H29f: -0.00264092
H31f: 0.00534748

c1sd = 4.6832
c1ed = 1.3004
c2sd = 1.526
c2ed = 0.0777
c3sd = -0.6539
c3ed = -1.8505
c4sd = -1.7951
c4ed = -0.0111
varx = 1.6706%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.91
 Actual Amplitude: 0.91
 Actual Power: 0.8281
 Distortion 2H-14H: 1.69566e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 13.9131 end: 18.1523 delta: 4.2392
 P2 start: 29.5418 end: 39.3902 delta: 9.8483
 P3 start: 46.9872 end: 62.7117 delta: 15.7245
 P4 start: 66.7452 end: 88.7746 delta: 22.0295

H3: -2.77989e-08 H15: 0.192767
 H5: 1.16755e-07 H17: -0.25983
 H7: -4.76553e-08 H19: -0.301552
 H9: 5.55978e-08 H21: 0.0274523
 H11: 3.03261e-08 H23: 0.143985
 H13: 8.98118e-08 H25: 0.080822
 H27: 0.0884992
 H29: -0.0733169
 H31: 0.154657

H15f: 0.0128511
 H17f: -0.0152841
 H19f: -0.0158712
 H21f: 0.00130725
 H23f: 0.00626022
 H25f: 0.00323288
 H27f: 0.00327775
 H29f: -0.00252817
 H31f: 0.00498894

c1sd = 4.6514
 c1ed = 1.2402
 c2sd = 1.4539
 c2ed = -0.0219
 c3sd = -0.7888
 c3ed = -2.0122
 c4sd = -2.0092
 c4ed = 0.0289
 varx = 1.6926%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.92
 Actual Amplitude: 0.92
 Actual Power: 0.8464
 Distortion 2H-14H: 1.53245e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 14.1325	end: 18.5079	delta: 4.3754
P2 start: 29.7059	end: 39.6275	delta: 9.9216
P3 start: 46.9895	end: 62.7509	delta: 15.7614
P4 start: 66.5608	end: 88.8936	delta: 22.3328

H3: -5.49935e-08	H15: 0.168557
H5: 1.6498e-08	H17: -0.25956
H7: -1.17843e-08	H19: -0.292557
H9: -1.83312e-08	H21: 0.0439133
H11: -1.49982e-08	H23: 0.156725
H13: -1.39599e-07	H25: 0.0821643
	H27: 0.0833262
	H29: -0.0664729
	H31: 0.14213

H15f: 0.0112371
H17f: -0.0152682
H19f: -0.0153977
H21f: 0.00209111
H23f: 0.00681415
H25f: 0.00328657
H27f: 0.00308616
H29f: -0.00229217
H31f: 0.00458485

c1sd = 4.914
c1ed = 1.4728
c2sd = 1.7411
c2ed = 0.0924
c3sd = -0.6023
c3ed = -2.1572
c4sd = -1.9762
c4ed = -0.0693
varx = 1.6734%

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.93
 Actual Amplitude: 0.93
 Actual Power: 0.8649
 Distortion 2H-14H: 2.82032e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 14.1803	end: 18.6231	delta: 4.4428
P2 start: 29.694	end: 39.6707	delta: 9.9767
P3 start: 46.8601	end: 62.6706	delta: 15.8104
P4 start: 66.2839	end: 89.0083	delta: 22.7244

H3: 0.0	H15: 0.155257	H15f: 0.0103505
H5: -1.30565e-07	H17: -0.247179	H17f: -0.01454
H7: -2.33152e-08	H19: -0.29231	H19f: -0.0153848
H9: 2.08542e-07	H21: 0.0428717	H21f: 0.00204151
H11: -1.33533e-07	H23: 0.161823	H23f: 0.0070358
H13: 2.51087e-08	H25: 0.0828738	H25f: 0.00331495
	H27: 0.082126	H27f: 0.0030417
	H29: -0.0613706	H29f: -0.00211623
	H31: 0.129167	H31f: 0.00416666

c1sd = 4.9945
c1ed = 1.4946
c2sd = 1.8225
c2ed = 0.0422
c3sd = -0.592
c3ed = -2.3773
c4sd = -2.0883
c4ed = -0.1195
varx = 1.6795%.

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 94/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.94
Actual Amplitude: 0.94
Actual Power: 0.8836
Distortion 2H-14H: 2.3841e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 14.2023 end: 18.7015 delta: 4.4992
P2 start: 29.6535 end: 39.6775 delta: 10.024
P3 start: 46.7039 end: 62.5486 delta: 15.8447
P4 start: 65.9712 end: 89.1226 delta: 23.1515

H3: 1.34559e-07
H5: -1.13029e-07
H7: 1.26869e-07
H9: -1.79411e-08
H11: -2.93582e-08
H13: 9.31559e-08

H15: 0.143536
H17: -0.23281
H19: -0.293268
H21: 0.0385232
H23: 0.166026
H25: 0.0837864
H27: 0.081275
H29: -0.0559053
H31: 0.115418

H15f: 0.00956905
H17f: -0.0136947
H19f: -0.0154352
H21f: 0.00183444
H23f: 0.00721853
H25f: 0.00335146
H27f: 0.00301019
H29f: -0.00192777
H31f: 0.00372318

c1sd = 5.0423
c1ed = 1.4996
c2sd = 1.8553
c2ed = -0.0243
c3sd = -0.6386
c3ed = -2.609
c4sd = -2.2717
c4ed = -0.1345
varx = 1.6886%.

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STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 95/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.95
Actual Amplitude: 0.95
Actual Power: 0.9025
Distortion 2H-14H: 1.38197e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 14.2813 end: 18.8649 delta: 4.5836
P2 start: 29.6798 end: 39.755 delta: 10.0751
P3 start: 46.5941 end: 62.44 delta: 15.8459
P4 start: 65.6636 end: 89.239 delta: 23.5754

H3: -2.66284e-08 H15: 0.128006
H5: 0.0 H17: -0.222473
H7: 3.42365e-08 H19: -0.290521
H9: 1.1539e-07 H21: 0.040161
H11: -2.90492e-08 H23: 0.172989
H13: 5.53052e-08 H25: 0.0844739
 H27: 0.0779198
 H29: -0.0495875
 H31: 0.100733

H15f: 0.00853375
H17f: -0.0130867
H19f: -0.0152906
H21f: 0.00191243
H23f: 0.00752126
H25f: 0.00337896
H27f: 0.00288592
H29f: -0.00170991
H31f: 0.00324946

c1sd = 5.151
c1ed = 1.5784
c2sd = 1.9663
c2ed = -0.0315
c3sd = -0.6217
c3ed = -2.8442
c4sd = -2.4298
c4ed = -0.1676
varx = 1.6874%.

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SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude:	0.96
Actual Amplitude:	0.96
Actual Power:	0.9216
Distortion 2H-14H:	1.96071e-05%
First strong harmonics:	15 and 17
Pulses per sine cycle:	16
Total switching events:	32
Delta Friendly:	No

P1 start:	14.4124	end:	19.1102	delta:	4.6978
P2 start:	29.7749	end:	39.9085	delta:	10.1336
P3 start:	46.536	end:	62.3453	delta:	15.8093
P4 start:	65.3614	end:	89.3572	delta:	23.9958

H3: -2.6351e-08	H15: 0.108907	H15f: 0.0072605
H5: 4.74319e-08	H17: -0.215973	H17f: -0.0127043
H7: -6.77598e-08	H19: -0.283915	H19f: -0.0149429
H9: -4.39184e-08	H21: 0.0479796	H21f: 0.00228474
H11: -1.43733e-07	H23: 0.182319	H23f: 0.00792689
H13: -9.12151e-08	H25: 0.0843247	H25f: 0.00337299
	H27: 0.0716951	H27f: 0.00265538
	H29: -0.0428049	H29f: -0.00147603
	H31: 0.0852769	H31f: 0.00275087

c1sd = 5.3333
c1ed = 1.6779
c2sd = 2.2071
c2ed = -0.0237
c3sd = -0.4616
c3ed = -3.1571
c4sd = -2.4747
c4ed = -0.3067
varx = 1.6758%.

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.97
 Actual Amplitude: 0.97
 Actual Power: 0.9409
 Distortion 2H-14H: 1.16644e-05%
 First strong harmonics: 15 and 17
 Pulses per sine cycle: 16
 Total switching events: 32
 Delta Friendly: No

P1 start: 14.5138	end: 19.315	delta: 4.8012
P2 start: 29.8407	end: 40.0253	delta: 10.1846
P3 start: 46.4503	end: 62.1932	delta: 15.7429
P4 start: 65.0087	end: 89.4751	delta: 24.4664

H3: 7.82381e-08	H15: 0.0915437	H15f: 0.00610291
H5: 1.56476e-08	H17: -0.207182	H17f: -0.0121872
H7: 4.47075e-08	H19: -0.27842	H19f: -0.0146537
H9: -5.21588e-08	H21: 0.0521467	H21f: 0.00248318
H11: 1.42251e-08	H23: 0.190542	H23f: 0.00828442
H13: 4.81465e-08	H25: 0.0842575	H25f: 0.0033703
	H27: 0.0653613	H27f: 0.00242079
	H29: -0.0356596	H29f: -0.00122964
	H31: 0.0693379	H31f: 0.00223671

c1sd = 5.4901
c1ed = 1.7249
c2sd = 2.4307
c2ed = -0.0647
c3sd = -0.3111
c3ed = -3.5453
c4sd = -2.5488
c4ed = -0.4674
varx = 1.6672%

STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 98/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.98
Actual Amplitude: 0.98
Actual Power: 0.9604
Distortion 2H-14H: 4.19324e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 14.7308 end: 19.7092 delta: 4.9784
P2 start: 30.077 end: 40.3508 delta: 10.2738
P3 start: 46.5151 end: 62.1282 delta: 15.6131
P4 start: 64.7173 end: 89.5968 delta: 24.8796

H3: -5.16265e-08
H5: -6.19518e-08
H7: 1.43817e-07
H9: -2.15111e-07
H11: 1.5488e-07
H13: -2.79975e-07

H15: 0.0658652
H17: -0.207397
H19: -0.262878
H21: 0.0725712
H23: 0.202243
H25: 0.0799664
H27: 0.052692
H29: -0.0284281
H31: 0.0527672

H15f: 0.00439101
H17f: -0.0121998
H19f: -0.0138357
H21f: 0.00345577
H23f: 0.00879319
H25f: 0.00319865
H27f: 0.00195156
H29f: -0.00098028
H31f: 0.00170217

c1sd = 5.7195
c1ed = 2.084
c2sd = 2.7023
c2ed = 0.2256
c3sd = -0.1936
c3ed = -3.663
c4sd = -2.7781
c4ed = -0.4078
varx = 1.6335%

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STEP-LOCKED MAGIC SINEWAVE

ANXC16 - 99/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.99
Actual Amplitude: 0.99
Actual Power: 0.9801
Distortion 2H-14H: 7.39122e-05%
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 14.7652 end: 19.8169 delta: 5.0517
P2 start: 30.0645 end: 40.3624 delta: 10.2979
P3 start: 46.3468 end: 61.8054 delta: 15.4586
P4 start: 64.2139 end: 89.7142 delta: 25.5003

H3: -7.66576e-08	H15: 0.0526332	H15f: 0.00350888
H5: 3.0663e-08	H17: -0.193077	H17f: -0.0113575
H7: -2.95679e-07	H19: -0.260921	H19f: -0.0137327
H9: 4.59945e-07	H21: 0.0668216	H21f: 0.00318198
H11: -2.64817e-07	H23: 0.208723	H23f: 0.00907493
H13: 4.12772e-07	H25: 0.0818162	H25f: 0.00327265
	H27: 0.0461789	H27f: 0.00171033
	H29: -0.0200324	H29f: -0.000690772
	H31: 0.0366549	H31f: 0.00118242

c1sd = 5.7942
c1ed = 2.0769
c2sd = 2.8045
c2ed = 0.1224
c3sd = -0.1902
c3ed = -4.1576
c4sd = -3.0789
c4ed = -0.493
varx = 1.6332%.

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STEP-LOCKED MAGIC SINEWAVE ANXC16 - 100/100

SUMMARY: This steplock-16 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 14 are virtually zero. The first major harmonics are the 15th and 17th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 1.0
Actual Amplitude: 1.0
Actual Power: 1.0
Distortion 2H-14H: 0.0001696179
First strong harmonics: 15 and 17
Pulses per sine cycle: 16
Total switching events: 32
Delta Friendly: No

P1 start: 14.9912 end: 20.2471 delta: 5.2558
P2 start: 30.3546 end: 40.7676 delta: 10.413
P3 start: 46.4717 end: 61.6754 delta: 15.2037
P4 start: 63.8527 end: 89.8376 delta: 25.9848

H3: 1.26485e-07	H15: 0.025173	H15f: 0.0016782
H5: -5.46415e-07	H17: -0.194148	H17f: -0.0114205
H7: 4.01138e-07	H19: -0.240459	H19f: -0.0126558
H9: -1.29015e-06	H21: 0.0904505	H21f: 0.00430717
H11: 2.96665e-07	H23: 0.218597	H23f: 0.00950421
H13: -8.05612e-07	H25: 0.0738835	H25f: 0.00295534
	H27: 0.0296534	H27f: 0.00109828
	H29: -0.0118333	H29f: -0.000408045
	H31: 0.0201655	H31f: 0.000650499

c1sd = 6.0205
c1ed = 2.5062
c2sd = 3.0955
c2ed = 0.5267
c3sd = -0.064
c3ed = -4.2889
c4sd = -3.4385
c4ed = -0.3713
varx = 1.5877%